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ABSTRACT

This report is a composite of the evaluation methods and findings derived from national evaluations of experiential education programs. Section I, an overview of assessing experiential education, has two chapters: an introduction which discusses the origins and current trends of experiential education and identifies the purpose of the study; and an outline of goals, outcomes, and key features of experiential education programs. Section II takes a closer look at five experiential education programs: Experience-Based Career Education, the Career Intern Program, Executive High School Internships Program, cooperative education programs, and Neighborhood Youth Corps. Each vignette answers the following questions about the particular program: How was the program developed? Who are the participating students? What are its goals? What are its key elements? How was the evaluation done and where is it reported? What are the evaluation findings and what are the evaluation problems? Section III, which presents conclusions about assessing experiential education, discusses the synthesis of evaluation findings, problems in evaluating experiential education programs, and alternatives to current practices. A selected bibliography is appended. (LMS)

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THE CURRENT STATUS OF ASSESSING EXPERIENTIAL EDUCATION PROGRAMS

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and

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March 1979

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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- Generating knowledge through research
- Developing educational programs and products
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FOREWORD

Experiential education has been the predominant form of learning throughout history. Vocational education has been a part of experiential education through its leadership in establishing cooperative education programs. Since the early 1970s there has been a movement in education to expand the educational opportunities of all students to include real world learning experiences as part of their educational programs. To meet the needs of research, the National Center for Research in Vocational Education has established a programmatic effort to investigate the experiential education phenomenon.

As is the case with other innovative educational programs, there is a need to evaluate the effectiveness of the innovation. While much activity has taken place with regards to evaluating experiential education programs, much needs to be done. This timely report brings together a composite of the evaluation methods and findings that have been derived from national evaluations of experiential education programs. As the report suggests, there is a diversity of evaluation problems that still require research to provide answers to the perennial questions of program effectiveness.

This project was undertaken with support from the National Institute of Education (NIE). Special appreciation is extended to Dr. Ronald Bucknam, NIE Project Officer for his help and contributions throughout the project.

The report was prepared by Dr. Michael R. Crowe, Project Director; and Dr. Kay A. Adams, Research Specialist. Dr. Jerry P. Walker, Associate Director for Evaluation, was the Principal Investigator. Thoughtful and useful suggestions for revising the report were provided by Dr. Roy Butler of the National Center.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

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SECTION I

OVERVIEW OF ASSESSING EXPERIENTIAL EDUCATION

In order that the reader may have a clear view of where he/she is heading as this report is examined, a brief description of the contents preceeds each major section.

Section I contains two chapters. The first delves into the origins and trends of experiential education, taking us back to the time when people learned through experience how to feed, clothe, and warm themselves. Moving to more modern times, chapter 1 considers the various forces which have caused a resurgence of interest in experiential education and lists a variety of programs which have sprung up as a result. This chapter concludes by identifying the purposes of the report, presenting its focus, and listing the criteria which were used to choose the evaluated programs.

Chapter 2 has been built around three frameworks:

- goals
- outcomes
- key features of experiential education programs

The evaluated programs can be grouped around five basic goals. These goals have been used as the first framework by which to categorize the programs. Outcomes represent the second framework through which to examine experiential education programs. We have considered not only desired outcomes, and societal outcomes, but potentially undesirable outcomes as well. A wide range of key features is offered as a third framework on which to build an understanding of experiential education. For each framework in chapter 2 a chart is included which illustrates the concept being discussed.

CHAPTER 1
INTRODUCTION

Origins of Experiential Education

Since the early 1970s there has been a movement in education to expand students' opportunities by including programs that provide learning experiences outside school. Much of this effort has been labeled experiential education which differentiates it from the academic or traditional education. In their simplest form, experiential education programs emphasize learning through experience rather than through books.

For example, if students were interested in studying journalism they could approach the subject in many ways: reading about it, looking at newspapers or magazines, observing others writing articles, or writing articles in a journalistic style. Only the actual experience of writing articles in a journalistic style would constitute experiential learning. Obviously, this type of learning can occur inside or outside the school. An experiential program designed for students interested in becoming professional journalists would involve students in the actual work experiences of the occupation outside the school setting. Thus, in our example, the students would enter the journalists' environment, perform their work activities, and gradually acquire the knowledge and skills required to be a journalist. For purposes of this report, experiential learning means learning about work and other life roles by performing them and involves expanding the educational environments to places where those roles actually occur.

Experiential education is not new. In fact, it has been the predominant form of learning throughout history. Prehistoric people learned through trial and error to feed, clothe, and warm themselves; in medieval guilds a boy learned a trade as an apprentice to a master craftsman; in early America a girl learned canning, meat preservation, and sewing by daily experience with homemaking tasks; when learning began to move away from the home, many land grant colleges provided opportunities for students to learn through experience in agriculture, engineering, and other practical subjects; within the last century there has been an increase in experiential education programs at the college level through internships in medicine, teaching, law, social work, and many other fields; at the secondary and upper elementary levels, students have been participating in experiential education through vocational education co-op programs, Junior Achievement, 4-H Clubs, and so on for some time.

Current Trends in Experiential Education

Recently experiential education has been gaining momentum at the secondary and postsecondary levels of American education. A variety of individuals with different perspectives are interested in this form of learning. For example:

- Students are interested in receiving an education more relevant to their roles as adults.
- Employers are pleading for experienced workers.

- Society is anxious to alleviate the problem of unemployed youth by providing paid work experiences that can also be educational.
- Educators and parents want to assure that students graduate from educational programs with specific competencies for performing work and life roles.
- Educational policy makers want to rekindle public support for education through more relevant programming.
- Taxpayers and Congressional representatives are concerned about the increased problems of unemployment, alienated workers, and misuse of welfare among youth.

A variety of experiential education programs have sprung from this foundation of interest and concern. The programs have emerged under many names including:

- Work experience programs
- Work education programs
- Manpower programs
- Employment and training programs
- Career education programs
- Cooperative education programs
- Work study programs
- Pre-apprenticeships
- Internships
- On-the-job training
- Apprenticeships

Purpose of the Study

There are two major purposes of this study:

- to select experiential education programs from vocational education, career education, and CETA in order to compare their goals, outcomes, and key features
- to examine the ways these programs have been evaluated to identify evaluation problems, successful evaluation strategies, and successfully measured variables.

Focus of the Report

The experiential education programs in this document were chosen on the basis of the following guidelines:

- They represent the available range of purposes and features.

- They have been rigorously evaluated through multiple strategies, generalizable samples, and a range of variables.
- They are operating in more than one setting.
- They appear to be enduring over time through adoptions and adaptions.
- They are for *youth* age fourteen to twenty-five.
- They are *sponsored* by *schools* or *jointly* by *schools* and the *employment community* rather than solely by employers or unions.
- They provide *initial* training experiences *outside* the school facilities.

Approach

The basis for this report was a literature review which was supplemented with program materials that focused on describing the goals and operations of each program. Additionally, more detailed and candid information about evaluation problems and successes was obtained from unstructured personal interviews with evaluators of experiential education programs.

CHAPTER 2
GOALS, OUTCOMES, AND KEY FEATURES OF EXPERIENTIAL EDUCATION PROGRAMS

An experiential education program is usually considered successful if it meets its goals, if the learners demonstrate a positive change related to the objectives, and if any unexpected effects of the program are positive. The purpose of this chapter is to describe *three* frameworks that were developed and used to provide initial answers to questions relating to goals, outcomes, and key features of experiential education programs. These frameworks are based on the authors' experiences of evaluating an experiential education program and their synthesis of the literature. They are, therefore, subjective and holistic in nature. They were developed in response to the need to describe experiential education as a phenomenon occurring in educational settings. Many programs were reviewed, and according to the criteria described in chapter 1 the following five programs were selected for analysis in this report.

- Experience-Based Career Education (EBCE)
- Career Intern Program (CIP)
- Executive High School Internships Program (EHSIP)
- Cooperative Education Programs (Co-op)
- Neighborhood Youth Corps (NYC)

Goals of Experiential Education Programs

In developing this framework, considerations focused on the goals of existing experiential education programs. Five basic goals or purposes were identified:

- *To build job skills.* Some programs emphasize development of work skills. Work skills may include job knowledge and skills in entry level and advanced areas.

- *To strengthen academic skills.* Many programs emphasize the development of academic skills as a secondary focus. For example, the Career Intern Program worked with potential high school dropouts to improve both their reading and math skills and their interest in learning through a combination of mini-courses and work experiences.

- *To facilitate career exploration and development and life skills.* Career education programs, such as Experience-Based Career Education, primarily emphasize career development through exploration in work settings.

- *To facilitate personal growth and maturation.* Experiential education programs, such as the Executive High School Internships Program, emphasize personal growth and maturation through work experience.

- *To provide income and social remediation for special needs groups.* Programs such as CETA's work experience programs for youth and vocational education work study programs primarily emphasize employment for the purpose of transferring income to disadvantaged youth. Themes such as skill or career development or academic progress are many times viewed as secondary purposes.

Most experiential education programs cut across these five goals with some emphasis on all of them. Few, if any, can be completely categorized by only one goal. Most programs have a range of goals, some primary and some secondary, in order to help youth make the transition from school to work. Figure 1 shows the framework that was derived from the five goals. The figure displays the five programs in relationship to the primary and secondary goals of experiential education programs.

Outcomes of Experiential Education Programs

Typical evaluation approaches include reviewing program objectives, constructing evaluation designs that use comparison or control groups (when possible), and developing evaluation measures and techniques that permit determination of how well stated objectives were achieved. Many programs state general kinds of expected outcomes rather than specific objectives. Because of heavy reliance on the use of stated program outcomes, it was necessary to develop an evaluation framework that describes experiential education program outcomes.

Desired Outcomes

Within a framework of themes and purposes, the specific goals of experiential education programs can be defined. However, since the programs are experiential in nature, many of the outcomes of these programs are elusive and difficult to define. The framework presented in Figure 2 represents an initial effort to categorize the complex array of program outcomes of such programs. It should also be noted that this array represents desired outcomes rather than actual measured attainments. The outcomes encompass those for students and society, at large, as was discussed in the introduction of this report. Moreover, some of the outcomes are considered to be both positive and negative in nature.

Societal Outcomes

Some of the broad societal outcomes of experiential education programs are—

- involving the employment community in education;
- changing the roles, responsibilities, and rules for educating youth;
- upgrading the skills of those entering the labor force;
- delaying formal entry into the labor market for part of the population so others can assume the jobs;
- increasing the demand for teenage labor;
- supporting local economies through stipends to youth;
- increasing community support for educational programs;

Figure 1

Primary and Secondary Goals of Selected Experiential Education Programs

SECONDARY GOAL FOCUS	PRIMARY GOAL FOCUS: Job Skill Development	Academic Development	Career Development & Life Skills	Personal Growth Development	Social Remediation
Job Skill Development					NYC
Academic Development	Co-op		CIP		
Career Development & Life Skills				EHSIP	
Personal Growth Development			EBCE		
Social Remediation					

Figure 2

Framework for Defining the Outcomes of Experiential Education Programs

EXPERIENTIAL EDUCATION PROGRAM OUTCOMES

EXPERIENTIAL EDUCATION PROGRAM GOALS				
Job Skill Development	**Academic Development**	**Career Development & Life Skills**	**Personal Growth Development**	**Social Remediation**
Job Skills Entry level In-depth **Job Placement & Retention** Job/Educational Placement Job Satisfaction Employer Satisfaction Long-Term Employment Earnings Employment Stability/Intensity	**Academic Achievement** Reading Writing Mathematics Problem Solving **Educational Awareness** Attitude toward Learning & School Awareness of Educational Requirements/ Opportunities Informed Course Selection	**Career Skills** Occupational Knowledge Career Planning & Choice Economic Awareness Use of Career Information **Employability Skills** Work Habits Work Attitudes Development of Job Contacts **Life Skills** Adaptability and Coping Citizenship Stable Family Life Productive Use of Leisure Time	**Self-Awareness** Knowledge of Abilities, Interests, Values Self-Concept Self-Esteem Acceptance of Responsibility/ Maturity Decision-Making Skills **Interpersonal Skills** Relations with Family Relations with Peers Relations with Adults Oral Communication	**Economic Indicators** Income Transfer Reduction of Youth Unemployment Cost Effectiveness **Social Indicators** School Return, Retention, Completion Deterrent to Delinquency and Crime Reduction of School Truancy Service to Disadvantaged & Handicapped Learners Reduction of Inequity & Sex Role Stereotyping

- increasing the extent to which nonwhite youth are substituted for white youth in the labor market;
- increasing the extent to which women and minorities enter nontraditional occupations.

Potentially Undesirable Outcomes

Critics of experiential education have posed some potentially undesirable outcomes of these programs. For example, such programs are criticized for—

- tracking students into low paying, dead-end jobs;
- lowering academic achievement by taking students away from regular classes;
- necessitating higher costs for education (job supervision, transportation, etc.);
- accelerating entry into the labor force rather than further education;
- promulgating capitalistic and protestant work ethics in a one-sided manner;
- accelerating premature maturation of young people by asking them to function as adults in work roles at too early an age;
- providing free or inexpensive help to employers;
- displacing older full-time workers by substituting part-time student learners.

Experiential education program outcomes are important to the extent that goals can be differentially interpreted. As the interpretation affects program outcomes, so the outcomes affect the evaluation design and thus, the program's degree of success.

Key Features of Experiential Education Programs

The framework to identify key features takes into account the fact that existing programs often take on a variety of forms and meanings under the general heading of experiential education. The programs vary on dimensions such as their purpose, the type of students they serve, their physical location, their length, their format and their sponsor. A framework of some of the key features of experiential education programs is presented in Figure 3 and described below.

Framework of Key Features

Purpose. The purpose of such programs can be viewed on a continuum with income transfer and productivity at one end and personal growth at the other. As discussed previously, many programs have multiple levels of purpose.

Figure 3

Framework of Key Features of Experiential Education Programs

FEATURES	RANGE OF OPTIONS				
Purpose	Provide Income	Build Work Skills	Strengthen Academic and Life Skills	Facilitate Career Exploration	Facilitate Personal Growth
Payment	None		Partial		Full
Academic Credit	None		Partial		Full
Supervision	Full School		Joint School & Nonschool		Full Nonschool
Length of Program	Year or More	School Term		Part of School Term	Field Trip(s)
Daily Time Commitment	Full Time				Part Time
Work/ Academic Mix	Work Setting Only	Daily Mix of Classes and Work		Work Setting with Periodic Seminars	School Setting with Periodic Work
Type of Work Placement	Unskilled	Semiskilled		Technical	Professional
	Related to Future Plans of Student				Unrelated to Future Plans of Student
Planning of the Learning Outcomes from the Work Experience	Low		Moderate		High
Student Composition	High School				Post High School
	Gifted and Above Average		Average		Disadvantaged
Cost	Low		Moderate		High

Payment. Students receive full, partial, or no pay for their experiences. Students usually receive pay when their participation results in employers' benefitting from the students' activities (i.e., productivity) or to provide income transfer to disadvantaged youth. Little or no pay is involved when students' experiences are generally educational rather than beneficial to the employers.

Academic credit. Students who complete experiential education programs receive academic credit ranging from partial to none for their participation. In some cases it is awarded "post facto" through a variety of student assessments (e.g., written tests, oral exams, portfolios of work samples, performance testing, etc.).

Supervision. Experiential programs can be supervised completely by the school, completely by a participating business or industry, or jointly by both agencies. Programs supervised by the school are sometimes called sponsored programs; the others, nonsponsored.

Length of time. Great variety exists in the amount of time students spend in work settings. In CETA and EHSIP programs, students spend the full school day in the same job for the entire semester. In co-op and work study programs, students spend only part of their day in a work setting with the other part spent in classes and other school activities. In EBCE and other career education programs, the students rotate through a variety of work settings for a semester as part of their school day.

Daily time commitment. The amount of time students spend in experiential programs varies from full-time to part-time. The pattern ranges from one full day a week for an entire term, to several hours each day for part of a term, to a periodic field trip.

Work/academic mix. Some experiential education such as a work study program or a CETA program is just work experience. There are no courses or seminars provided for students to integrate what they are learning on the job with underlying principles and generalizations. Others, like the EHSI Program emphasize work experience. However, students meet once a week for a seminar to reflect on what they are learning. Other programs like a vocational education co-op program and EBCE combine an equal mix of work experience and related classwork. Still other career education type programs like CIP are primarily academic classes with some field experience incorporated.

Type of work setting. Experiential education occurs in a variety of work settings and occupations. A work study or CETA program may place students in unskilled or semiskilled occupations such as fast food service, sales, groceries, janitorial, and hospital service. A co-op program would generally place a student in semiskilled technical occupations such as secretarial, agribusiness, welding, or child care. A career education program such as EBCE might place a student in a range of occupations from unskilled to professional. The EHSI Program provides students exposure to the work of government officials, doctors, and other professional, and business people.

Planning of the work experience. Some programs permit students to plan or contract for their experiences with little or no adult supervision during the term. Others encourage joint planning by both teacher and student. Still others are planned and controlled solely by the teacher, while in others most planning is done by a participating employer. Since employers or community sponsors have considerable control over the structure and context of students' learning, the value of the work experience often depends heavily on the employer.

Student composition. Experiential education programs serve youth from fourteen to twenty-one and include secondary and postsecondary programs. The target audience they serve varies as well. Most manpower work experience programs and work study programs serve disadvantaged youth. Vocational education co-op programs serve primarily average youth. A program such as EBCE is for all students while the EHSI program generally attracts gifted and above average youth.

Cost to school. The per pupil cost of an experiential education program covers a wide range. The average cost per pupil for a secondary vocational education co-op program is $125, while the career intern program (CIP) costs $2,732. However, the CIP costs reflect the total educational program while the co-op figure represents only part of the cost for educating a vocational student.

The importance of delineating the key features of experiential education programs is to illustrate that there is no singular treatment or program that represents experiential education. Partly because of the diverse student populations and local community needs, key features are combined in complex and unique ways to achieve program goals and outcomes. There does not appear to be a consistent one-to-one correspondence between key features and program goals and outcomes. That is, if the goal is career development, the program may or may not pay students for their experience. There is little evidence available to support the benefits of one key feature over another with regard to achieving similar program goals. It seems that the environmental context or conditions leading to program development affect the combinations of key features (program activities) that eventually become an experiential education program. The development of programs may also represent the realities of political compromise between educators and the work community. The point is that the programs are not a singular treatment based on a coherent theory of educational instruction or youth development, but represent a range of treatment all of which are believed to achieve similar goals.

Development of Vignettes

As described earlier, the following five programs were selected for analysis:

- Experience-Based Career Education (EBCE)
- The Career Intern Program (CIP)
- Executive High School Internships Program (EHSIP)
- Cooperative Vocational Education (Co-op)
- Neighborhood Youth Corps (NYC)

The vignettes in Section II are organized around the frameworks for describing the goals and key features of experiential education programs. Figure 4 compares the goals and their intended outcomes (from Figure 2) for each of the programs, while Figure 5 compares the key features for the programs.

Figure 4

Comparison of the Goals of Five Experiential Education Programs

GOALS	PROGRAMS				
	EBCE	CIP	EHSIP	CO-OP	NYC
Job Skill Development				Job placement Skill training	Increase employment of youth Skill training
Academic Development	Problem-solving skills Reading skills Basic quantitative skills Writing skills	Upgrade cognitive skills and academic achievement	Writing skills Understanding of organizations Understanding of executive performance		
Career Development & Life Skills	Use career information Know careers Positive attitude Make career/education plans Obtain employment information	Use career information Make career plans Awareness of careers Career planning orientation	Work habits	Career decision making Work habits	
Personal Growth Development	Oral communication Self-knowledge Interpersonal skills	Self-concept	Oral communication Self-confidence Self-knowledge Decision-making skills	Responsibility and leadership Attitude development	
Social Remediation		Increase high school completion		Financial benefits	Reduce teenage crime Redistribute income to poor Increase lifetime earnings of enrollees

Figure 5

Comparison of the Key Features of Five Experiential Education Programs

KEY FEATURES	PROGRAMS				
	EBCE	CIP	EHSIP	CO-OP	NYC
Primary Purpose	Facilitate career development	Strengthen academic and life skills	Facilitate personal growth	Build work skills	Transfer income
Payment	Generally none	None	None	Partial to full	Full
Academic Credit	Full	Full	Full	Full	Partial
Supervision	School	Joint school and nonschool	School	Joint school and nonschool	Full nonschool
Length of Program	School term or more	Year or more	School term	School term or more	Year or more
Time Commitment	Part-time	Full-time	Full-time	Part-time	Full-time
Work Academic Mix	Weekly mix of classes and work	Primarily class setting with periodic work	Primarily work setting with periodic classes	Weekly mix of classes and work	Work setting only
Type of Work Placement	Semiskilled, technical, and professional	Unskilled and semiskilled	Professional	Semiskilled and technical	Unskilled and semiskilled
Planning of the Learning Outcomes from the Work Experience	High	Moderate	Low	High	Low
Student Composition	All students	Disadvantaged	Gifted and above average	Average	Disadvantaged
Cost	Moderate	High ($2,732 per student based on 11 months)	Moderate ($634 per student)	Low ($125 per student)	High

SECTION II

VIGNETTES OF EXPERIENTIAL EDUCATION PROGRAMS

Section II takes a closer look at five experiential education programs. In fashioning a vignette of each program, we have viewed it from various angles.

- How was the program developed?
- Who are the participating students?
- What are its goals?
- What are its key elements?
- How was the evaluation done and where is it reported?
- What are the evaluation findings and what are the evaluation problems?

Chapters 3 through 7 sketch a few of the existing programs and offer a view of the immense diversity that is experiential education. The experiential education programs described in this section are:

- Experience-Based Career Education
- Career Intern Program
- Executive High School Internships Program
- Cooperative Education
- Neighborhood Youth Corps

CHAPTER 3
VIGNETTE ONE: EXPERIENCE-BASED CAREER EDUCATION*

Introduction

The *program description* for each program included in chapters 3-7 is guided by Figure 5 in chapter 2. The *evaluation findings* for each program are presented in the order described in Figures 2 and 4.

Program Description

Overview

Experience-Based Career Education (EBCE) allows students to participate in a series of short-term, individualized work experiences as part of their high school curriculum. After these exploration activities students may choose to be exposed to several careers through career experiences in work settings.

Student Composition

EBCE is open to all high school aged students who like to learn by doing. Participants represent a cross-section of ability and achievement levels as well as sex and ethnic groups. It is not necessarily a program for dropouts or for gifted students, although both are represented.

Program Development and Organization

EBCE began early in 1972. Under the sponsorship of the United States Office of Education (USOE) and later the National Institute of Education (NIE), pilot models of EBCE were developed and tested in four quite different economic settings by four educational laboratories. The Appalachian Educational Laboratory began a program using the government and industrial resources of West Virginia's capital, Charleston. The Far West Laboratory for Educational Research and Development set up its Far West School in Oakland, California, an area with an ethnic mixture of blacks, Chicanos, Asians, and whites. The Northwest Regional Educational Laboratory established Community Experiences for Career Education (NWREL) in Tigard, Oregon, a Portland suburb. Philadelphia's Research for Better Schools (RBS) began its academy for Career Education in the dynamic political and economic atmosphere of the inner city.

The pilot test of the four EBCE models involved 600 students in grades ten through twelve. These original EBCE models (with accompanying implementation guidelines and curriculum materials) are currently being disseminated. USOE, through their Part D program, has provided considerable financial assistance for schools interested in adopting or adapting one of the EBCE models.

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*Adapted from Rex W. Hagans, "What Is Experience-Based Career Education?" *Illinois Career Education Journal*, 33, No. 3 (Spring 1976).

Goals

The goals of EBCE as described by Cordor and Watkins (1976) are illustrated below.

I. Career Development Skills and Knowledge

I-1. The student can integrate information about occupations with information about self.

I-2. The student can locate and use information about occupations.

I-3. The student has a positive attitude toward career planning.

I-4. The student knows the functions, characteristics, and requirements of a broad range of self-selected occupations.

I-5. The student knows some of the factors associated with selected occupations that contribute to job success and satisfaction.

I-6. The student will demonstrate that he/she has made an informed decision regarding his/her post high school educational/vocational plans.

I-7. The student can obtain employment information, complete job applications, take interviews, write letters of application, prepare a resume, etc.

I-8. Students who have tentatively selected a career area can begin to acquire some of the related job entry skills and experience.

II. Self-Knowledge: Interests, Abilities, and Values

II-1. The student can accurately demonstrate awareness and understanding of his/her own current interests, abilities, values, and limitations relevant to career goal selection and achievement, and recognize that these may change with further education or experience.

III. Reading Skills

III-1. The student can read selections from a newspaper or other popular periodicals, and—

a. recognize the main point(s);
b. recognize the author's purpose;
c. locate specific facts and details.

III-2. The student can read and comprehend materials pertaining to his or her areas of career involvement, such as instructions, manuals, forms, parts lists, and technical articles.

III-3. The student can read and comprehend materials appropriate to his or her avocational and recreational interests.

III-4. The student can read selections required for educational or occupational advancement and—

a. define the author's purpose and support that definition with evidence;
b. identify and explain different levels of meaning included in the selection;
c. identify biases with supporting evidence;
d. extend interpretation beyond the printed information;
e. recognize and describe different writing styles.

IV. Problem-Solving Skills

IV-1. The student can define his/her problem by identifying a need or a discrepancy between where he/she is and where he/she wants to be. This can be in a personal, group, societal, academic, and/or career situation.

IV-2. The student can use a variety of sources and techniques of data gathering.

IV-3. The student can propose alternative solutions, anticipate consequences of various actions, and implement a course of action.

V. Oral Communication

V-1. The student will demonstrate an ability to communicate orally both ideas and feelings in a manner that is effective and appropriate to various situations (social, school, or work).

V-2. The student will demonstrate an ability to listen effectively.

VI. Writing Skills

VI-1. The student can express in writing ideas and feelings so that most people can understand what was stated.

VI-2. The student can write clearly and correctly the materials pertaining to his/her areas of career involvement (e.g., reports, orders, records, and forms).

VI-3. The student can write letters, descriptions, and reports required in normal daily living.

VII. Interpersonal Skills

VII-1. The student can effectively participate in peer and adult interactions based on appropriate role relationships and obligations; accept the validity of individual rights and perceptions; and contribute to the resolution of conflicts resulting from differing personal needs and values.

VII-2. The student will demonstrate the ability to cooperate with others as a means of attaining goals.

VIII. Basic Quantitative Skills

VIII-1. The student will demonstrate an ability to comprehend and interpret information presented numerically and graphically in newspapers and weekly news magazines.

VIII-2. The student will demonstrate correct performance of arithmetic operations necessary for successful daily living, such as—

a. making and receiving change;
b. modifying recipe quantities;
c. measuring items;
d. doing comparison shopping;
e. generally dealing with weights, measures, calendars, clocks, etc.

VIII-3. The student will demonstrate correct performance of mathematical operations necessary for his/her chosen career, or for meeting the requirements for continued study if a continuation of formal education is chosen as the next stage in career development.

IX. Maturation Skills

IX-1. The student will demonstrate the ability to use direct sources (i.e., observations or interviews with relevant people) in greater proportion to indirect sources (i.e., books written about a topic) in gathering information for reports or projects.

IX-2. The student will demonstrate the ability to conduct conversations with an adult that reveals the student's self-confidence, ability to discuss a fixed topic for a reasonable amount of time, and an understanding of the other person's message and feelings.

IX-3. The student will demonstrate the ability to cooperate with adults and assume responsibility for carrying out tasks which he/she agrees to complete.

IX-4. The student will demonstrate an increase in behaviors that reveal a tolerance for people who are different in ideas or background than himself/herself, an openness to change, and a willingness to trust others when circumstances warrant.

Key Program Elements

The features of EBCE that distinguish it from other forms of instruction are listed below:

- The fact that students are not paid for their work but receive academic credit and the standard diploma of their high school.

- A strong community consortium or advisory board is involved in policy and decision making.
- A system of accountability that fosters students' assumption of responsibility and assures the program's educational integrity.
- An emphasis on using community sites as the principal bases for learning experiences.
- An integration of the traditional role of teacher and counselor and a sharing of these roles with other adults in the community.
- An individualized instructional system based upon assessment of student needs, prescription of experience-based learning activities and synthesis of community experiences.
- A basic skills component that focuses on reading, writing, and mathematics as they are used by adults in the broad community.
- A life skills component that allows students to obtain a variety of real experiences in political and civic activities, personal finance, and maintenance of personal health.
- A career development component that guides each student through a sequence of career-oriented learning activities at various levels (exploration, in-depth investigations, etc.).

The Students' Experience in EBCE

The key program elements are woven into the daily experiences of students in a variety of ways. For example, one EBCE student selected a railroad company, a business forms manufacturer, and a medical laboratory as learning sites. The student met and talked with a yardmaster, a tower clerk, a billing clerk, a carryall driver, a union representative, a salesperson, three lab technicians, and the laboratory director. From them, the student learned about the effects of routine and monotonous tasks on workers, the benefits and disadvantages of different union jurisdictions within a single company, the importance of being able to visualize design problems, the skills necessary to help clients articulate their own needs, the status of minority employment in two different firms, the advantages of different lab techniques, the importance of a service orientation for business success, the approaching mayoral elections, and the Watergate hearings. With their guidance and the guidance of his learning coordinator, the student read a book on the history of unions and several chapters in a college text on clinical diagnosis and laboratory methods. He helped to design a business form, program a computer to keep track of several train locations at once, and run a chemical test for pregnancy. He worked on upgrading his math skills in the area of ratios and percentages so he could complete a culture analysis. Throughout this entire process, the student was treated as an adult, assumed responsibility for meeting his own appointments and completed a complex science project at the medical laboratory, complete with performance objectives. In addition to the science project, he also completed a number of less complex learning activities related to his diagnosed interest in politics and psychology. He then moved on to a project in the field of communications where he extended his already considerable skills in writing.

Evaluation of EBCE

Multiple evaluations of EBCE have been conducted by various agencies.

Evaluation by the Four Laboratories

Each of the four educational laboratories conducted an extensive evaluation of the implementation of its EBCE model.

Method. These evaluations included several methods and instruments. For example:

- Parents of students were surveyed about the EBCE program in which their son or daughter was involved.
- Resource persons from the community who had sponsored EBCE students were asked to respond to questionnaires regarding their involvement.
- All four programs measured the reading and arithmetic achievement of their experimental and control students using the CTBS on a pre-post basis.
- At three of the laboratories, a 50 percent sample of experimental and control students were selected and interviewed by a third party evaluator.
- The Assessment of Student Attitudes was given to both experimental and control students at two laboratory sites to measure attitude towards school.
- Graduates of EBCE were interviewed by a third party evaluator to assess the after school effects of EBCE on students.
- A variety of instruments were used to measure students' career development and self-development.

Evaluation of EBCE by Educational Testing Service (ETS)

Information from students. ETS conducted an independent third party evaluation of EBCE using a variety of techniques. Interviews or questionnaires were administered to students, former students, parents, and employers across the four EBCE sites. Information was collected from a 50 percent sample of experimental students and control students through a "Current Student In-Depth Interview."

The interview schedule measured variables such as the following:

- Knowledge of general career areas.
- Career interests.

- Methods of learning about careers.
- Knowledge of career requirements.
- Self-rating of personal characteristics related to career choices.
- Oral communication skills.
- Attitude toward career planning.

Information from parents. Parent questionnaires were completed by parents of EBCE students. Information was collected in areas such as the following:

- Communication with their children about EBCE.
- Contact with EBCE staff.
- Positive and negative changes noted in their children.
- Perception of the relative importance, effectiveness, and improvement by their children in different areas of learning (e.g., perform occupational skills, be punctual, and organize time, etc.).
- Parental attitude toward EBCE.
- Perception of the strengths and weaknesses of EBCE.
- Comparison of EBCE with past school experiences.

Information from former students. Interviews were conducted with a sample of former EBCE students. The "Former Student Interview" focused on variables such as the following:

- Type and length of work since graduation, difficulty in getting work, average number of hours worked per week.
- Job satisfaction, career satisfaction.
- Career plans.
- Type and length of education since high school.
- Educational satisfaction.
- Educational plans.

Information from employers. A "Resource Persons Interview" was used to collect information from members of the employment community regarding variables such as the following:

- How and why they and their organization became involved in EBCE.
- Whether role, time, and cost requirements met their expectations.
- Problems encountered.
- Adequacy of information and help received from EBCE staff.
- Perceived impact of EBCE on their organization's quantity and quality of work, hiring, and training practices, and total environment.
- Description of program operating procedures.
- Effectiveness of the program.
- Willingness to continue EBCE, and extent to which they would recommend EBCE to others.
- Strengths and weaknesses of the program.
- Type of activities done with students (e.g., talk about job opportunities, teach students to perform job-related tasks, etc.).
- Perceptions of changes in their students' self-confidence, ability to ask questions, ability to respond to directions, ability to take the initiative, and reliability.

Ethnographic evaluation. In addition to the interviews and questionnaires described above, ETS used an anthropological perspective to develop a rich description of the EBCE programs in Oakland, California; Charleston, West Virginia; Tigard, Oregon; and Philadelphia, Pennsylvania. Data collection techniques included:

- In-depth structured and unstructured interviews with selected students and staff.
- Informal interaction with program personnel and students.
- Participant observation of student activities.
- Establishment of an anthropology workshop for interested students.
- Unobtrusive measures of variables such as interaction patterns and group formation.
- Case studies on representative students (through self-kept journals of their daily activities, in-depth observation, lengthy interviews, examination of their academic records, and interviews with staff about them).
- Study of records, documents, and reports about EBCE programs.
- Examination of students' written work.

- Examination of various student records.
- Systematic observation of student activities over time (e.g., sixty observations were completed at Far West School in San Francisco, California) were used in various combinations at the five sites to provide ethnographic accounts of the program operations and outcomes.

Reports

Reports of the evaluations conducted of the laboratory programs include publications listed below:

Goldhammer, Keith et al. *Experience-Based Career Education: A Description of Four Pilot Programs Financed through the National Institute of Education, Final Report.* Washington, D.C.: National Institute of Education, ED 118 833.

The evaluation reports that follow are among several that have been conducted on the Far West Laboratory for Educational Research and Development, located in San Francisco, California:

Employer-Based Career Education, Evaluation Report. September 28, 1973, ED 117 297.

Experience-Based Career Education: Interim Evaluation Report, March 15, 1974, ED 117 296.

Spotts, Robert et al. *Experience-Based Career Education: Final Evaluation Report,* 2 Volumes, 1974, ED 117 298, ED 117 299.

Evanson, Jill, and Spotts, Robert. *Experience-Based Career Education Final Evaluation Report,* November 1976.

Watkins, Richard W., and Jenks, C. Lynn. *The Far West Model EBCE Experience-Based Career Education: Evaluation Handbook,* April 5, 1976.

Evaluations of the Northwest Regional Educational Laboratory, Portland, Oregon include:

Herron, Marshall et al. *Employer-Based Career Education,* 1973, ED 117 300.

Employer-Based Career Education Evaluation Report, Washington, D.C.; National Institute of Education, 1973, ED 117 297.

Final Evaluation Report of the NWREL Experience-Based Career Education Program, Washington, D.C.: National Institute of Education, Career Education Program, 1974, ED 117 301.

Owens, Thomas R., and Fehrenbacher, Harry L. *Evaluation of the Community Experiences for Career Education Program,* April 1974, ED 107 719.

Reports of evaluation of the Appalachian Educational Laboratory, Charleston, West Virginia include:

Ranson, James T. et al. *Changes in Students' Attitudes as Measured by a Semantic Differential Instrument,* Employer-Based Career Education Technical Report Number 39, September 1973, ED 110 645.

Seyfarth, John T. et al. *Students' Attitudes Toward the Program as Indicated by an Analysis of Interview Data,* Employer-Based Career Education Technical Report Number 42, September 1973, ED 110 648.

Seyfarth, John T. et al. *Parents' Attitudes Toward the Program as Indicated by an Analysis of Interview Data,* Employer-Based Career Education Technical Report Number 43, September 1973, ED 110 649.

Hilderbrand, John R. et al. *Experience-Based Career Education,* Appalachia Educational Laboratory, Final Evaluation Report, September 30, 1974, ED 109 498.

Experience-Based Career Education, Appalachia Educational Laboratory, Interim Evaluation Report, March 15, 1974, ED 109 497.

Shively, Joe E., and Sanders, Jack. *Alternative Education: Evaluation and Implementation of EBCE,* April 1976, ED 121 842.

Reports on Research for Better Schools, Philadelphia, Pennsylvania include:

FY 1973 Evaluation Report for the Research for Better Schools Employer-Based Career Education Model, 1973, ED 109 496.

Summative Evaluation Report 3: Interim Evaluation Report, March 15, 1974, ED 117 295.

A series of nine reports are being developed by Educational Testing Services in Berkeley, California which describe their evaluation methods and results. Those available as of January 1977 include:

Anderson, Shel, and Drucker, Charles B. *Experience-Based Career Education in Charleston, West Virginia: An Anthropological Perspective, Volume II.*

Anderson, Shel, and Drucker, Charles B. *Experience-Based Career Education in Oakland, California: An Anthropological Perspective, Volume III.*

Smith, David M., and Theophano, Janet S. *The Academy for Career Education: An Ethnographic Evaluation, Volume IV.*

Durgin, Edward C. *An Ethnographic Account of (CE)$_2$: Experience-Based Career Education in Tigard, Oregon, Volume V.*

Corder, Reginald, and Watkins, Richard W. *Student Outcomes and Participant Opinions in EBCE, Volume VI.*

Corder, Reginald, and Watkins, Richard W. *Search for and Development of Instruments Measuring Student Outcomes of Experience-Based Career Education Programs, Volume VII.*

Creech, F. Reid. *Behavioral Observations at Far West School: A Description of Experience-Based Career Education, Volume VIII.*

Trask, Anne E. *Experience-Based Career Education: An Inter-organizational Analysis, Volume IX.*

An excellent summary of the EBCE evaluation conducted by the four laboratories and by ETS is noted below:

Bucknam, Ronald B. "The Impact of EBCE—An Evaluator's Viewpoint." *Illinois Career Education Journal,* 33, No. 3, Spring 1976.

Other Evaluations of EBCE

Several other evaluations of EBCE are being conducted. These include:

- Third party evaluations of the sites who have adopted or adapted EBCE using funds under Part D of the Vocational Education Amendments from USOE. Approximately 115 schools are currently implementing EBCE and conducting evaluations of its effectiveness.
- The Center for the Study of Evaluation is developing a model for auditing the third party evaluations of EBCE.
- Research for Better Schools is conducting a longitudinal study of the long-term effects of EBCE.
- Huron Institute is conducting a three year implementation study of EBCE.

Evaluation Findings

The following table pinpoints some of the major evaluation findings. The findings are drawn primarily from the article by Bucknam (1976). Other sources are noted in the table. The findings are organized by the framework of goals of experiential education programs presented in chapter 2.

Figure 6

Summary of Findings from Evaluations of EBCE Programs

OUTCOMES	METHOD	FINDING
JOB SKILL DEVELOPMENT *Job Skills*		No findings reported.
Job Placement & Retention Placement in jobs or further education	Interviews with former students one or two years after participation.	Students were asked what effect EBCE had on their preparation for further education and jobs. With regard to education, 82 percent said EBCE had a positive effect while 6.5 percent felt the effect was negative. With regard to employment, 87 percent said their programs had a positive effect while 3 percent felt the effect was negative.
Employer Satisfaction	Interviews with resource persons.	The five most mentioned gains to the organization associated with EBCE were: (1) gives exposure to the community, lets public know about us, good public relations; (2) students are helpful; (3) students improve employee morale, improve the working environment, keep staff on their toes, and are personally satisfying to staff; (4) increase our knowledge of the community and give us student opinions; (5) helps our training program, teaching the students helps employees, we learn from the students.
ACADEMIC DEVELOPMENT *Academic Achievement*	Parent questionnaire.	Eighty-seven percent of the parents with youngsters in EBCE thought the program was highly (46 percent) or somewhat (41 percent) effective in having students learn basic academic skills such as reading, writing, and mathematics.

Reading Mathematics	Measurement of experimental (325) and control (165) students using three CTBS subtests on "Reading Comprehension," "Arithmetic Concepts," and "Arithmetic Application" on a pre-post basis.	The hypothesis was that there would be no significant difference in academic achievement. (Since the EBCE students would miss out on some regular classes, it could be hypothesized that they would suffer academically.) Of the possible twelve comparisons (four laboratories and three subtests) ten were not significantly different and two were significantly different and in favor of the control groups (however, the two exceptions are neither the same subtest nor the same laboratory program).
	Measurement of 68 RBS EBCE students and 30 control students using the *Comprehensive Test of Basic Skills* over a two-year time span.	RBS students showed significant first-year growth on the two arithmetic subtests and significant second-year growth on all three subtests. During the second year, EBCE students were superior to the control in reading comprehension and arithmetic application. Two year cumulative growth for EBCE students at RBS demonstration site was significant on all CTBS subtests, and comparative growth over the two years was significantly superior to the control group in both arithmetic subtests.
	Measurement of 14 NWREL EBCE students over two-year time span using CTBS.	NWREL's demonstration site showed significant growth in reading comprehension, arithmetic concepts and applications during the first year but not on a two year cumulative basis.
Educational Awareness Attitude Toward Learning & School	Parent questionnaire.	One of four changes most frequently mentioned by parents of EBCE participants was that their youngster "has greater interest in school, is more involved in school, and has a positive attitude toward learning."
	Assessment of Student Attitudes (questionnaire).	EBCE students had significantly more positive attitudes toward: education in general, the school curriculum, school resources, school counseling, and the total learning environment than a comparable control group.

Figure 6 – Continued

OUTCOMES	METHOD	FINDING
CAREER DEVELOPMENT & LIFE SKILLS *Career Skills* Occupational Knowledge	Parent questionnaire.	Ninety-five percent of parents with youngsters in EBCE thought the program was highly (63 percent) or somewhat (32 percent) effective in having students learn more about career opportunities.
Career Planning and Choice	Interviews with a 50 percent sample of experimental and control students in EBCE were conducted by a third party evaluator.	The experimental group scored significantly higher than the control group ($x^2 \leq .001$) on "attitudes towards career planning."
	Former student interviews.	Graduates of EBCE were asked to name the kinds of learning considered most useful to them one to two years out of the program. Of the four most mentioned, two were "how to plan a career, to prepare, to experience, to know what I want to do and what I do not want to do" and "how to relate to the real world."
Employability Skills		No findings reported.
Life Skills	Measurement of 68 RBS EBCE students and 36 control students over a two-year time span using the *Assessment of Student Attitudes Toward School.*	During each program year, EBCE students at the RBS program showed increased growth on the five subscales of the instrument. First year growth occurred in subscales measuring student attitudes toward school curriculum, school counseling, and learning environments. Second year increases occurred in attitudes toward evaluation in general, school resources, and learning environments.

PERSONAL GROWTH DEVELOPMENT *Self-Awareness* Self-Esteem	Parent interviews.	One of four changes most frequently mentioned by parents of EBCE participants was that their youngster "has more confidence and self-assurance, was more self-reliant, and independent."
Acceptance of Responsibilities/ Maturity	Parent interviews.	Another of the four changes most frequently mentioned by parents of EBCE participants was that as a result of the program, their youngster "is more mature, more grown up" and "has greater sense of responsibility; is more reliable and dependable; and is working harder than before." Ninety-one percent of parents with children in EBCE thought the program was either highly (59 percent) or somewhat (32 percent) effective in having students learn responsibility.
	Former student interviews.	Graduates of EBCE were asked to name the kinds of learning considered most useful to them one to two years out of the program. Of the four most mentioned, one was "responsibility, self-reliance, confidence; how to get things done, and how to study and work hard."
Interpersonal Skills	Parent interviews.	Ninety-three percent of parents with youngsters in EBCE thought the program either highly (63 percent) or somewhat (31 percent) effective in having students learn to communicate effectively with others.
	Student interviews by a third party evaluator.	The experimental group scored significantly higher than the control group ($x^2 \leq .001$) on "oral communication."
	Former student interviews.	Graduates of EBCE were asked to name the kinds of learning considered most useful to them one or two years out of the program. One of the most mentioned was "how to communicate, that is to write and talk with adults and peers."

Figure 6 – Continued

OUTCOMES	METHOD	FINDING
SOCIAL REMEDIATION *Economic Indicators*		No findings reported.
Social Indicators School Retention & Completion	Student records.	EBCE students drop out of education at a rate of approximately 5 percent while control students drop out at a rate of 15 percent.
COMMUNITY SUPPORT	Parent questionnaire.	Thirty parents of EBCE participants were asked how the program compared with their youngsters' past school experiences. Ninety percent of the parents felt that EBCE compared favorably, while only 2.8 percent compared EBCE unfavorably. Additionally, 90 percent reported they would want their youngsters to participate in the EBCE program, knowing what they know if they had it to do again. About 5 percent said they would not, and about 5 percent said they were not sure.
	Resource person interviews.	Of 202 community resource persons who sponsored EBCE students, 81 percent said their organization would continue working with EBCE programs; 27 percent said they would continue to participate in EBCE with *more* students and 62 percent said they would continue with about the *same number* of students; 45 percent indicated that the organization gained by participation in EBCE and 50 percent indicated that the organization neither gained nor lost; and 96 percent said they would recommend the EBCE program to other resource organizations for their potential involvement without reservations (76 percent) or with some reservations (20 percent).

Synthesis of Findings

EBCE has been evaluated through multiple instruments from numerous vantage points using a wide variety of variables. Many positive findings have been accrued to the program. The program appears not to hamper academic achievement although it takes students away from their regular classes. It appears that EBCE helps—

- to improve attitudes toward learning,
- to improve students' knowledge of, attitudes toward, and skill in planning their careers,
- to reduce high school drop out, and
- to facilitate students' self-awareness, maturity, and ability to accept responsibility.

Evaluation Problems

On the other hand, the following should be noted:

- Such a range of variables were measured through the numerous evaluations of EBCE that the chance of generating significant findings was increased.
- Much of the data in the career development and personal growth areas are based on testimonials by students and their parents.
- Many of the career development and personal growth variables that were evaluated through more rigorous means did not produce significant findings.

CHAPTER 4
VIGNETTE TWO: THE CAREER INTERN PROGRAM*

Program Description

Overview

The Career Intern Program (CIP) housed in Philadelphia is an alternative for high school dropouts and those who are potential dropouts. Programs based on the CIP model are currently being initiated in other locations using funds from the Youth Employment Development and Demonstration Act. CIP is not entirely an experiential education program since it provides classroom as well as experiential instruction. However, it emphasizes the work experience as part of its program and is intensively career oriented.

CIP has two phases. Phase I consists of a ten-week set of courses intended to increase students' self-awareness and career awareness, and to review academic subjects. Phase II consists of courses of basic academic subjects, a career seminar, career counseling, and two weeks of work experience in the labor market.

Student Composition

Students in grades ten through twelve who are not succeeding in their high schools are recruited by obtaining lists of droputs and potential dropouts from high school counselors. The program in Philadelphia served about 250 individuals, primarily black students.

Program Development and Organization

CIP was initiated in 1964 by the *Opportunities Industrialization Centers of America, Incorporated (OIC)*. A self-help program for blacks and other minorities, it began in an abandoned police station in the slums of North Philadelphia. OIC has since grown to a network of more than 100 job-training centers across the nation. CIP is jointly sponsored by OIC and the Philadelphia School District.

It is a small labor-intensive program run by a staff which has experience with disadvantaged youth but does not necessarily have credentialed educators. The program provides a supportive atmosphere for youth who have been judged as failures in their previous schooling. However, the program does not allow students to escape from the real world into an artificially secure environment. CIP deals with its interns as whole people. It has components for providing academic instruction, career and personal counseling, self-preservation skills, and job skills. Students are responsible for formulating their own career development plan which guides their program.

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*Adapted from Richard A. Gibboney Associates, *The Career Intern Program Final Report. Volume I: An Experiment in Career Education and Volume II: Technical Appendices*. Blue Bell, Pennsylvania, 1977.

The CIP course offerings do not differ much from those in public schools. There are required courses, a career counseling seminar, and a few electives. However, the classes are smaller and more open-ended. The CIP semesters are only twenty-two weeks long and no grade distinctions are made.

A career counseling seminar emphasizes individual study of careers and peer group counseling. The two weeks of work experience emphasizes learning both job skills and good work habits.

Goals

The goals of CIP are:

1. To help interns feel better about themselves and the amount of control they can exercise over their lives.
2. To help interns begin to gain greater amounts of information about careers and a better ability to make plans for careers.
3. To increase interns' career awareness and use of career information resources.
4. To upgrade interns' cognitive skills and academic achievement.
5. To improve interns' vocational adjustment and career planning orientation.
6. To increase the number of interns who remain in and complete high school.
7. To improve interns' long-term career development in terms of employment and continuing education.

Key Program Elements

Some of the key features of CIP include the following:

- CIP is a program for high school dropouts and potential dropouts.
- CIP is a small labor intensive program serving about 200 youth at one time. There is a 1:15 ratio of adults to students.
- The principal provides instructional support in addition to serving as an administrator.
- The staff is hired and supervised in a manner at variance with union-negotiated agreements. The director can hire and fire without regard to seniority. Separation of functions is deliberately blurred; all staff are part of the team. The working day lasts as long as required.
- Cost per student is $2,732 based on an eleven-month school year.

- The enrollees in CIP are called interns rather than students. No effort is made to provide extra-curricular offerings common in traditional high schools.
- CIP deals with interns as whole people; they are seen as individuals.
- CIP provides a school experience congruent with realistic life goals.
- CIP does not buffer interns from failures and frustration. It attempts to make their experiencing real.
- Interns set specific goals for themselves through a Career Development Plan. Students are trusted with a major role in planning their own programs.

Program Problems

- Informality has sometimes encouraged world-wise interns to pit staff against each other.
- Conflicting standards for awarding academic credit has been confusing to interns.
- Retraining school staff to function in a distinctively different setting has been difficult.

The Experiences of a CIP Intern

Eddie's story tells of the obstacles some public school students meet in trying to get a diploma. Eddie had a pretty good idea of what he wanted to do with his life, but the problem was that he had been unable to obtain his diploma. Without it Eddie knew he would have to take whatever he could get on the street. He had seen too many frightening endings out there to settle for that alternative. Here is his story.

When his family moved from West Philadelphia to Germantown, Eddie breathed a sigh of relief. He had been dodging gang members in the old neighborhood for two years and he was glad to leave the scene of the battle. In spite of a new neighborhood and a new school, Eddie found himself fighting the same battle. There were new gangs to deal with, and he was not doing much better at the new high school than he had at the old. He refused to enter the gang scene which he knew would lead to his dropping out of school. At the same time, he could not be a part of the successful student scene. Eddie characterizes his own dilemma this way:

> If you're a hoodlum (gang member), you're cool. If you're not a hoodlum, you're 'iced' (snubbed). If you're a 'bookworm,' they call you a dummy.

Eddie needed to find a place where he could be himself, and where he could get the understanding and help to finish high school.

CIP was close to his school and he wandered over occasionally to check it out.

> If you walk into a regular school, everybody stares at you like you're . . . somebody from a different planet. . . . over here (CIP) I found the school was together. They don't give you any hassles about what you're doing here, and how you got in.

So the first thing about CIP that appealed to Eddie was its atmosphere of openess. Eddie was admitted to CIP in January 1974. Before long he had endeared himself to teachers and counselors, taking an active role in student activities. Handsome and a stylish dresser who loved to flirt with the girls or spend an afternoon rapping with a teacher, he became involved in the Progressive Student Association, a student initiated group that functioned as a voice for interns and planned student social activities. As a member of the group, Eddie participated in planning dances and organizing basketball games between students and staff. During his second semester at CIP, Eddie had a major part in a play written and directed by another intern.

Eddie related especially well to adults, forming close friendships with many of his teachers and other staff members. As a result of his easy relationship with CIP staff, they entrusted him with responsibilities, such as relaying messages between staff members or helping teachers carry books from the resource center.

Just about everybody knew Eddie. His classmates respected him for his efforts in their behalf, and his teachers and counselors saw him as special. He had found the place he was looking for at CIP.

Because of his reading problems, however, it took him much longer to get through the program than many of the interns who entered CIP when he did. He had been in high school for five years before coming to CIP and had made it only as far as the eleventh grade. Like many students in the large high schools, Eddie's slow pace is probably attributable to his never having admitted his reading deficiencies. At the same time, no one was paying much attention to the fact that, after so many years, he had accumulated so few credits. Eventually he would either have dropped out or he would have been dropped from the rolls. But in the supportive atmosphere at CIP, Eddie had a chance to admit his problems, and to seek and receive the help he needed to improve.

In his last semester at CIP, Eddie was taking only one course because he had completed everything else he needed. He had had to repeat his English course once, but by this time, Eddie was reading adequately. One aspect of the school he complained about in his last semester was the packets teachers were using in the classrooms.

His dissatisfaction is mixed with an understanding of their intent and the value of doing them. Somehow, his mixed feelings represent the movement Eddie had made toward an understanding of the value of school and toward increased self-awareness.

> . . . I couldn't stand the packets . . . they ask you the same questions through the whole packet. You finish one question and turn the page and you see the same question in a different form . . . maybe they do it to check you out, to see whether you're rushing through or whether you're taking your time to think about the answers . . . I always wanted to catch the guy that made up those packets. . . . We had one of them called "How do you feel about yourself." Well you're going to exaggerate to make yourself look good. But then if you look at it, you say, "Well how do I feel

about myself?" And if you really sit back and think of all the wrong things you've done, you'd have to put down something different from what you first wrote. Or how do you feel at this particular moment? Nervous? So you really can't just put down anything off the top of your head. You have to really sit back, read it, and then think about what it asks you, and then write it down. It made you think. It was sickening. But I guess to a certain extent they were alright.

Unlike many of his fellow interns, Eddie had known for a long time what he wanted to be. He looked into other careers when he was at CIP and had six hand-on experiences during his stay, but his first love was electronics.

When I was about eight years old, my father bought me a radio. I took that radio apart and he beat me. Then he said, "That radio better be working!" I got the crystals back in and it was working. That's what got me into it. Then I started dealing with a little bit of everything. It's fascinating. You take a radio that's a good twelve years old and you say, "Wow, I'm going to fix this radio." You sit down and get to pulling those tubes out, testing them and seeing which ones are no good. You put new tubes in and you might take the cord off because the cord had a break in it. You know, you can get a short circuit because of that. You take the cord off, and you put another one in there, slap it in the wall and the radio comes on. You see what happened. That's a trip.

Recalling his favorite hands-on experience, Eddie tells about working with an electrician for two weeks as he went from job to job in the city.

I thought I knew a lot about being an electrician. I thought electrician and electronics were just about the same thing, until I had that work experience. First of all, I didn't really think about all the things electricians do and how they work. I thought to myself, "I'm really more interested in building things, electrical things," so I talked to that electrician and he showed me some other stuff he was working on, on his own time. It made me think about that career in a different way, but I knew I still wanted to work with electronics.

Eddie never entertained any ideas about going to school beyond high school. His major goal was to get a high school diploma. A diploma, to him, symbolized a clean break from the street scene that constantly lured him but that he diligently tried to avoid.

I really wanted to get a high school diploma. I know what it's like out there and I want to get a better job than just what I could pick up on the street. I really go to find out what I would have missed if I had dropped out. What opportunities I would have had. And that's why I'm glad I came over here. I feel sorry for the people I see downtown. You see them sitting on the corner or sleeping in the street and you say, "Damn, will you look at that." But really, if you sit back and think about it, you know, they *can* get it, they *can* do it. Maybe it's because they feel sorry for themselves, like if other people don't try for them, they're not going to try for themselves. I'm not going to end up like that.

With the help of his counselor, Eddie looked into opportunities for getting into electronics. He finally decided he was going to go into the Air Force, and applied even before he graduated.

At the CIP graduation ceremony in August, Eddie received an award for perfect attendance. The contrast of this award with his past school behavior is striking. Had Eddie not found a place where he could be himself, which gave him the support and patience to work on his reading skills, he probably would never have graduated from high school.

Evaluation of CIP

A comprehensive evaluation of CIP was conducted by Richard A. Gibboney Associates, Incorporated (1977) with funds from NIE.

Purpose

The evaluation was summative in nature and answered the following questions:

1. Do students admitted to CIP show significantly greater gains in cognitive skills, academic achievement, vocational adjustment, career selection strategies, realism of career choice, and self-image than those denied admission into the program?

2. Do students admitted into the CIP show greater gains in long-term career development than students denied admission?

Dates

The evaluation was conducted January 1974 through February 1976.

Sample

Students were randomly selected from a list of dropouts/potential dropouts from feeder high schools and assigned to either CIP or a control group. This process was repeated for three cohorts of students so there were three experimental and three control groups. The usable sample size was eighty-four (experimental) and sixty-four (control).

Method

A pre-post, control group design was used. Pretests were administered as part of admissions interviews. The first series of posttests were administered ten weeks into the program. The second series of posttests were administered after one year. A follow-up interview was used to collect career progress information from graduates of the program. In addition, two full-time field evaluators conducted a schedule of interviews and observations with samples selected from the experimental

and control groups. Some key questions were used to focus the interview but they were basically unstructured and informal. Program observations by the field evaluators were conducted both formally and informally. Observations were written up regularly and filed; observations were later reviewed, discussed, and synthesized.

Data Analysis

Analysis of covariance using the posttest score as the criterion and the pretest score as the covariate was used. A 3 x 2 comparison model compared the three experimental and control groups across the three cohorts. Descriptive information from observations and interviews was compiled, interpreted, and used to supplement the quantitative data.

Evaluation Findings

Highlights of some of the major findings from the evaluation of CIP are presented in Figure 7.

Synthesis of Findings

Overall, the evaluation results were highly favorable. Most outcomes increased, some significantly for the experimental group. The program appears to have the greatest measurable effects on school attendance and retention, career progress after high school, and vocational adjustment. The program had moderate effects on cognitive skills and academic achievement. Little measurable changes in self-image were found through structured instruments, however, many changes in self-perception were found through observation and interviews. No measurable changes were found in perceived ability to influence future events.

Evaluation Problems

1. Reading level of tests may be too demanding for most interns.

2. There was a lack of fit between curriculum content and the content of tests, especially for the evaluation done early in the program.

3. Students' pretest scores on the self-esteem inventory were very high. This left little room for measurable growth in self-esteem.

4. Students' scores in the Internal External Scale were not used in writing up the results of the study. It is assumed that this scale was not found to be very useful in this context.

Figure 7

Summary of Findings from Evaluation of CIP

OUTCOMES	METHOD	FINDING
JOB SKILL DEVELOPMENT		No findings reported.
ACADEMIC DEVELOPMENT *Academic Achievement* Problem Solving	*Standard Progressive Matrices (SPM)* by J. C. Raven: measures nonverbal reasoning using pictorial designs as stimuli (30-45 minutes).	Interns improved in general reasoning ability test performance while control scores did not change.
Reading and Mathematics	*Tests (SAT), Advanced Battery* by Richard Madden, et al.: measures academic achievement in reading comprehension and mathematics application (35 minutes).	Interns gained five academic months in reading while control scores did not change. Interns gained four academic months in mathematics while control scores did not change. Final levels of reading and mathematics achievement were still far below national averages.
Educational Awareness		No findings reported.
CAREER DEVELOPMENT & LIFE SKILLS *Career Skills* *Career Planning & Choice:* Amount of career thinking and planning, amount of time and thought given to making choices, amount	*Career Development Inventory (CDI),* Form I, by Donald E. Super, measures the vocational maturity of adolescent boys and girls through an objective,	Interns increased scores in all three areas more than did controls. (When used ten weeks into the program, this instrument showed no significant difference). The most gain over controls occurred in use of resources.

known about self-selected occupations; *resources for exploration*—preference for sources of information for help in making job or college plans, helpfulness of sources of information, knowledge of educational requirements for different jobs, knowledge of special tools used in occupations; *information and decision making.*	multi-factor self-administering, paper and pencil inventory, 91 items (30 minutes to one hour to complete).	
Employability Skills *Career Progress:* Entered college, been placed on a job, or entered advanced technical training.	Two instruments were used to interview graduates. An employer questionnaire was used to interview employers of graduates.	Interns were substantially more likely than controls to be in school, slightly more likely to be employed, and less likely to be involuntarily "at home."
Life Skills Perceived ability to influence future events.	*Future Orientation: Internal External Scale (IES)* by Julian B. Rotter: measures the degree to which the respondent expects that reward reinforcement is dependent or independent of his/her own behavior. The scale consists of 29 forced choice items, each item reflecting two conflicting statements from which the subject can choose (15 to 25 minutes).	No significant differences were found between treatment and control groups.

Figure 7 – Continued

OUTCOMES	METHOD	FINDING
PERSONAL GROWTH DEVELOPMENT *Self-Awareness* Self-Concept: General self-esteem, social self-esteem, home parents self-esteem, and school academic self-esteem.	*Self-Image: Self-Esteem Inventory (SEI)* by Stanley Coopersmith: measures general level of self-esteem through two forms. Form A contains 48 items. Form B contains 25 items. A sample item is "I'm a lot of fun to be with." The respondent checks one of two columns ("like me" or "unlike me").	Although both treatment and control subjects rated their self-esteem highly, differences between the groups were not significant. However, interns did improve in: assuming responsibility for keeping and rescheduling appointments; completing assignments; participating attentively in classes; test taking skills, organizing to accomplish tasks; working together; taking the initiative in seeking out resources, and seeing themselves as good students. On the other hand students' internal standards of excellence for themselves remained at a low level. Interns often did the minimum requirements to get by.
Interpersonal Skills		No findings reported.
SOCIAL REMEDIATION *Economic Indicators*		No findings reported.
Social Indicators School Attendance and Retention	Records.	Only about 33 percent of the interns dropped out of school as compared with 85 percent of the control students. School attendance increased. However, considerable staff effort went into keeping attendance high.

CHAPTER 5
VIGNETTE THREE: EXECUTIVE HIGH SCHOOL INTERNSHIPS PROGRAM*

Program Description

Overview

The Executive High School Internships Program (EHSIP) provides an opportunity for about 2500 high school juniors and seniors from thirty school districts in nineteen states to learn about organizational leadership as interns to executives in business and government. The sponsoring executives include judges and attorneys, social service directors, government and hospital administrators, television producers and directors, newspaper editors, and research directors of scientific institutes. Interns spend a full school term, Monday through Thursday, at their placement working as administrative assistants without pay. They are immersed in the world of organizations, learning how decisions are made, and goals achieved. On Friday, interns attend seminars designed to reinforce practices of management, administration, and decision making.

Student Composition

Ninety percent of the students in the EHSI Program are seniors; 10 percent are juniors. Generally the interns are in the upper fourth of their class and plan to attend college. Students volunteer to participate in the program and there is overall a higher rate of female participation than male.

Program Development and Organization

The Executive High School Internships Program began as a project in New York City in 1971 as a joint undertaking between the city's Human Resources Administration, headed by Jule M. Sugarman, founder of Head Start, and the Board of Education, whose chancellor, Harvery B. Scribner, had been selected in part to bring alternative education to the city's system. The EHSI Program design was developed by Sharlene P. Hirsch and was implemented during the fall semester of 1971 with one EHSIP coordinator and twenty students. During the 1972-73 school year the program was expanded to include twenty coordinators from the New York City School System. Also during this school year, seven other school districts began implementing the Program. From the 1971 fall term through the 1976 fall term, a total of thirty-six school districts had at one time or another supported the EHSI Program, 6,919 students had chosen to be interns, and eighty-six coordinators had been trained. The program has been adopted by school districts in twenty states and the District of Columbia. Generally, the program has been supported by local resources rather than with federal support.

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*Adapted from Michael P. Crowe and Jerry P. Walker, *Final Report on the Evaluation of the Executive High School Internships Program* (Columbus, Ohio: The Center for Vocational Education, 1977). James M. Weber, *A Re-examination of the Design and Data Collected as Part of the Third Party Evaluation of the Executive High School Internships Program* (Columbus, Ohio: The Center for Vocational Education, 1977).

Goals

There are two major goals of the EHSI Program. First, the program provides interns the opportunity to learn from an in-depth exposure to the world of work. Students are placed with executives from business and other organizations. Interns experience working in an organization so that they can appreciate the role of managers. Second, interns are expected to acquire a greater knowledge of themselves, greater self-confidence, and a foundation of personal habits that will better prepare them for work in an organizational environment. In addition to these two major goals, there are published performance objectives listing student behaviors related to (1) students developing a more accurate understanding of organizations and those who manage and administer them, and (2) students demonstrating the ability to function effectively in an organizational environment with an executive.

Key Program Elements

The features of the EHSI Program that distinguish it from other forms of instructions are listed below:

- Students volunteer to be interns and through a series of interviews with sponsors (executives) make choices regarding their preferences for a placement.
- Interns are placed in an organization for a full school term.
- The sponsors are located within the executive level of their organizations.
- The program provides consistent attempts to reinforce placement experiences through the use of logs, seminars and projects.
- Interns do not receive monetary compensation for their work, but do receive academic credit for their experiences.
- Interns are slotted at management and executive levels. They are not expected to fill existing slots; rather each can get hands-on feel for what an executive's daily routine is like.
- There is a full-time EHSIP coordinator whose responsibilities include recruitment of students and sponsors, conducting seminars, providing counseling to interns, and managing the day-to-day program operations.
- There is a national office, Executive High School Internships of America, that provides coordinator training, curriculum materials, and technical assistance to programs upon request.

The Interns' Experiences in EHSIP

The interns' experiences in the program are diversified and depend upon the needs of the host organization and the personality of the sponsor. Interns are placed in organizations ranging in size

from 1 to 2 individuals to over 1000. Executive interns are expected to be provided with a placement that offers them the opportunity to observe and become involved in decision making by top officials, and to participate as part of the professional staff. Although each placement represents a unique relationship resulting from the intern's and sponsor's interest and personality, there are generally three types of placements: special assistant internship, special agent internship, and administrative service combination.*

In the special assistant internship, the students spend most of their time with the sponsor. In this type of internship experience, the interns are given special assignments such as attending meetings, writing reports, collecting information for the sponsor, preparing draft correspondence, and in certain situations representing the sponsor at meetings. The special assistant internship provides an opportunity for interns to experience being a part of an administrative staff.

The special agent internship experience provides the interns with the opportunity to spend part of their time with the sponsor and the remainder rotating through some of the organization's departments under the supervision of the sponsor. This type of internship experience is particularly popular with hospital administrators and provides the interns with a viewpoint about the total organization. The administrative service combination internship provides the interns with the opportunity to divide their time between management activities and direct relationships with clients. Thus, interns in a drug abuse center, for example, might spend part of their time with the director in management activities and the remainder of their time working with clients under the supervision of staff professionals.

The following five vignettes provide the reader with examples of interns' experiences. The vignettes are drawn from the evaluation reports of the program.

Ned is a second semester junior. His sponsor is the vice president of marketing and research at the local savings bank. Ned spent a week as a teller and as a savings counselor. Several weeks were devoted to studying other bank services, allowing him to compare those offered by his bank. Especially proud of a research report growing out of his telephone survey, he was able to monitor people's reactions to the services provided by the bank. In scientific terms, he carefully examined his random selection of 200 names from the phone book and his development of a survey questionnaire using a Likert format.

He apologized for a 23 percent return rate but as his time at the placement was ending, he wanted to write the report before he left. Ned felt the greatest benefit of the program was in helping him overcome his shyness. He said he had been offered a summer job running the bank's premium program.

Beth is a junior, a cheerleader, and a member of student government. Her sponsor is the State Executive Director for Career Education. Responsible for organizing a statewide youth conference, Beth prepared letters announcing the conference, made logistical arrangements for participants, and

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*Adopted from *Basic Design: Executive High School Internships Program.* New York: Executive High School Internships of America, 1976.

helped plan the agenda. She didn't realize how important her boss was until the conference was held. With teaching as a career goal, she regarded what had been learned about education as invaluable. A second internship in yet another area would be of interest to her.

Vivian chose her placement at an architectural company because she liked mathematics and wanted to learn about engineering. Her sponsor is one of the partners of the company. At first, Vivian spent her time doing calculations for the engineers, and preparing format letters for customers. After about four weeks she said the employees began to trust her, and she began to get assignments more like those she thought an executive intern should have. Scheduling the jobs that came into the company became part of Vivian's responsibility. She explained how each job has several parts that must be completed in sequential order. She prepared a job board that detailed each step of a job to aid the smooth flow through various operations. This cut down delays in finishing a job. Vivian explained the company was in financial trouble and had to terminate a draftsperson because the draftsperson was not producing. She felt sorry for the person but realized the necessity of economizing when profits are low.

Marsha is an intern with the District Attorney's office. Her sponsor is an assistant district attorney. She has done undercover work for the agency and must maintain confidentiality regarding her work. She is planning to go to law school and upon graduation hopes to be a lawyer for the FBI.

Lana's sponsor is the president of an advertising agency. Lana's responsibilities have included representing the president at meetings during the two weeks he was in the National Guard, watching commercials for clients, and attending meetings for new accounts. She said that the one thing she liked about her sponsor was his honesty. He would turn down an account if he did not believe he could help a client. She hopes to go to college and major in business.

Evaluation of EHSIP

A national evaluation of EHSIP was conducted by the National Center for Research in Vocational Education. The evaluation was supported by the National Institute of Education.

Purpose

The evaluation study proposed to answer some crucial questions regarding the effectiveness of an expanding experiential education program, and to provide a better picture of the program in terms of student growth and the instructional processes of program participants.

Evaluation Design

The design features for conducting the evaluation of EHSIP are presented below.

Research Design: Six EHSI Programs were selected on criteria that provided a reasonable estimate of their conformance to the national model. The treatment groups were those students

(N = 119) who volunteered during the 1976 spring term to be interns during the 1976 fall term. The control groups were those students (N = 93) who volunteered during the 1976 spring term to be interns during the 1977 spring term. Both groups were administered pretests and posttests during the 1976 fall term. The treatment students, sponsors, coordinators, and parents were administered a questionnaire during the 1976 fall term.

Instruments: Instruments were: (1) a *management test* designed to assess student understanding of organizations (both in terms of their structure and the factors affecting the performance of their sponsors) as expressed in the program objectives; (2) *Gordon Personal Profile and Inventory,* six of the eight published scales and three derived subscales, which were used to assess students' abilities to function effectively (in terms of good work habits, self-confidence and communication skills) as expressed in the program objectives; (3) *writing test* (posttest only) designed to assess the students' ability to write fluently and precisely as expressed in the performance objectives; (4) *Intern Questionnaire* which provided the "treatment" students with an opportunity to describe their program related experiences, their attitudes toward those experiences, and the changes they felt occurred during the internship experience in terms of their abilities to function effectively as defined by the performance objectives; and (5) *Executive (Sponsor) Questionnaire, Coordinator Questionnaire, and Parent Questionnaire* which provided the respondents with the opportunity to indicate the changes they felt occurred in their intern's abilities to function effectively as compared to the EHSI Program performance objectives.

Analyses: Analyses performed on the data were: (1) analysis of treatment and control students' posttest scores from the evaluation instruments; and (2) analysis of gain scores and group variations for treatment and control students.

Evaluation Findings

Highlights of some of the major findings from the evaluation of EHSIP are presented in Figure 8.

Synthesis of Findings

The quantitative data showed no statistical differences, while the questionnaire and interview data indicated overall the interns were achieving to a moderately high degree some of the performance objectives of the program. With respect to the questionnaire and interview information, it would appear that interns are most successful in achieving the program objectives associated with personal growth—awareness of skills and abilities and an increase in their sense of self-confidence. There is less evidence to support their achievement of the performance objectives of understanding organizational structure, executive performance, and communication skills.

Evaluation Problems

1. There was less than clear and consensual knowledge and commitment to the learning objectives on the part of the interns, sponsors, and coordinators.

Figure 8

Summary of Findings from the Evaluation of the EHSI Program

OUTCOMES	METHOD	FINDING
JOB SKILL DEVELOPMENT		No findings reported.
ACADEMIC DEVELOPMENT *Academic Achievement* Cognitive Skills: Understanding Organizational Structure and Executive Performance	Measurement of experimental (119) and control (93) students using a Management Test developed to assess students' understanding of organizations as expressed in the program objectives. Grain scores were computed for each of the treatment and control students and group variations were analyzed.	No significant differences were observed among the evaluation groups on the criterion measures.
	Intern questionnaire.	Interns' self-reports of the effectiveness of program in helping them understand organizational structure and executive performance consistency showed that two-thirds of the interns felt they were learning about organizations and executive performance.
	Executive questionnaire.	Overall about two-thirds of the executives (sponsors) reported that they felt the program was effective in helping interns understand organizational structure and executive performance.
	Parent questionnaire.	Overall about two-thirds of parents reported that they felt the program was effective in helping interns understand organizational structure and executive performance.

Writing Skills	Measurement of experimental and control students (posttest only) using a writing test designed to assess the students' ability to write fluently and precisely.	No significant differences were observed among the evaluation groups on the criterion measures.
	Intern questionnaire.	About half of the interns reported that writing logs enhanced their writing skills.
		About half of the interns reported that the program was effective in improving their writing skills.
	Executive questionnaire.	About half of the sponsors reported a moderate increase in their interns' writing ability.
		About 80 percent of the sponsors reported that their interns wrote while at the placement and about half of those indicated the interns' writing was readable and understandable.
Educational Awareness Attitude Toward Learning & School	Measurement of experimental and control students using a question with five responses about how well they liked school.	No significant differences were observed among the evaluation groups.
	Parent questionnaire.	One of the changes most frequently mentioned by parents of EHSIP participants was that their youngster "likes school and was more motivated to learn" in the EHSI Program when compared to past school experiences.

Figure 8 – Continued

OUTCOMES	METHOD	FINDING
CAREER DEVELOPMENT & LIFE SKILLS *Career Skills*		No findings reported.
Employability Skills Work Habits	Measurement of experimental and control students using the *Gordon Personal Profile and Inventory*. Three derived subscales, which were not the same as the published subscales, were used to assess students' abilities to function effectively in terms of the good work habits expressed in the program objectives.	No significant differences were observed among the evaluation groups on the criterion measures.
	Intern, sponsor, parent questionnaires.	Overall two-thirds of the interns, sponsors, and parents reported that the program had been effective in helping students accomplish the work habits.
	Intern and sponsor interviews.	The evaluators reported that many of the students already possessed work habits before they entered the program.
Development of Job Contacts	Sponsor questionnaires.	Over three-fourths of the sponsors reported: (1) they would consider hiring the intern as a full-time or part-time employee, (2) they would recommend the program to other organizations, and (3) they and their organization would continue to work with the program.
Life Skills		No findings reported.

PERSONAL GROWTH DEVELOPMENT *Self-Awareness* Self-Concept Self-Esteem	Measurement of experimental and control students using the *Gordon Personal Profile and Inventory*. Three derived subscales and four of the six published subscales were used to assess students' awareness of skills and abilities and sense of self-confidence.	No significant differences were observed among the evaluation groups on the criterion measures.
Acceptance of Responsibilities/ Maturity	Intern, sponsor, and parent questionnaires.	Overall two-thirds of the interns, sponsors, and parents reported that they felt the program had been effective in helping students become aware of themselves and show self-confidence.
Interpersonal Skills Relations with Adults	Sponsor questionnaire.	Over half the sponsors reported that: (1) the intern worked eagerly with others and was easy to work with, and (2) the professional staff had strong positive feelings about the intern.
Oral Communication	Sponsor questionnaire.	About 50 percent of the sponsors reported that their interns were highly fluent and initiated conversations with adult workers.
SOCIAL REMEDIATION *Economic Indicators*		No findings reported.
Social Indicators		No findings reported.
COMMUNITY SUPPORT	Interviews.	Although interviews were not structured to collect frequency data, the impression of the evaluators was that the sponsors, parents, and interns were enthusiastic about the program. School administrators at the central office staff were supportive while principals, counselors, and teachers generally expressed concern about students leaving school for a full school term.

2. Although instruments were developed and/or selected so that they were keyed to performance objectives, they may have been insensitive to the program's objectives.

3. Although the control students volunteered to be in the program at the same time as the treatment students, they may not have been comparable as indicated by their pretest scores. Also there was a 25 percent mortality rate for the control group.

4. Comparison of interns' pretest scores to other groups' scores on the *Gordon Personal Profile and Inventory* indicated that interns were more similar to first level management personnel than to high school students. Thus, there was a restricted range to show measurable growth.

CHAPTER 6
VIGNETTE FOUR: COOPERATIVE EDUCATION PROGRAMS*

Program Description

Overview

There are a variety of programs that lie within the general category of cooperative education or work study at both the secondary and postsecondary levels.

In a cooperative vocational education program there is an arrangement between the school and employers. The student receives instruction by alternating study in school with a job in any occupational field. These two experiences must be planned and supervised by the school so that each contributes to the student's education and to his/her employability. Work periods and school attendance may be on alternate half-days, full days, weeks, or other periods of time.

Secondary Cooperative Vocational Education Programs

In the Vocational Education Amendments of 1968, cooperative education is provided through: State Vocational Education programs (Part B), and the Cooperative Vocational Education programs (Part G).

Overview. The purpose is to provide on-the-job work experience related to the student's course of study and chosen occupation.

Student Composition. These programs are for individuals in all areas of the state, who desire such education and training. For Part G funds, priority is given to areas with high dropout rates and high youth unemployment.

Program Organization. Co-op programs are funded fully or partially through federal dollars. State vocational education programs are based upon statewide matching (fifty-fifty) for all basic grant vocational education programs. Application of state criteria for allocation of funds determines the level of assistance.

Cooperative vocational education programs receive 100 percent federal support. Funds are used for—

1. program operation and ancillary services;

2. reimbursement of added training cost to employers when necessary;

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*Adapted from Asa S. Knowles and Associates, *Handbook of Cooperative Education* (London: Jossey-Bass, Inc., 1971); and Robert W. Stadt and Bill G. Gooch, *Cooperative Education* (Indianapolis: The Bobbs-Merrill Company, 1977).

3. payment for certain services or unusual costs to students while in cooperative training.

Co-op programs are administered by the state or local educational agencies under supervision of the State Board for Vocational Education in accordance with state plan provisions.

Co-op programs are offered in a variety of occupations including:

1. Business and office procedure
2. Distributive education
3. Home economics
4. Trade and industrial skills
5. Off-farm agricultural business
6. Interrelated programs
7. Special purpose programs
8. Health occupations

Co-op programs employ a teacher coordinator who is trained in coordination techniques and has had work experience in the vocational fields his/her students are pursuing. The teacher coordinator advises students, identifies suitable training stations for them, teaches a class in school which is closely related to the experience on the job, and evaluates the learning which occurs. Larger schools tend to operate multiple co-op programs with each coordinator specializing in a particular family of occupations. In smaller schools, co-op programs are operated either by a single coordinator responsible for a broad range of occupations or by individual vocational education teachers.

Another requirement for co-op education programs is the formation of a local advisory committee representing the various interests of the trade, occupation, or occupational family involved.

Goals. The primary goal of co-op education programs is development of the student's occupational competency. The occupation the student studies in school is based on his/her stated career objectives. The special goals include:

- *Career decision making:* Students gather information which is useful later in making decisions about type of employer, place of employment, and requirements for advancement.
- *Good work habits:* Students learn the personal and interpersonal habits that are required to find, maintain, and advance in jobs.
- *Placement:* Students have an advantage in finding full-time jobs. A student who performs effectively in a co-op program is very likely to stay on in full-time employment after

completing the school program. As a result, typically more than 80 percent of the placement rates are in the occupation for which the student is trained.

- *Responsibility and leadership:* Students learn to accept responsibility and take the initiative for tasks in a mature manner.
- *Problem-solving skills:* Students learn to resolve a variety of on-the-job problems.
- *Attitude development:* Employability improves development of self-concept, especially attitudes regarding one's self-worth, earning power, and financial independence.
- *Financial benefits:* Students receive supplemental income.
- *Skill training:* Students learn entry level job skills.

Key Program Elements.

- Co-op programs provide in-school vocational instruction related to occupational field and training job.
- Work periods include alternate half days, full days, weeks, or other periods of time. (Number of hours of work generally equal the number of hours spent in school.)
- Students receive regular wages for their work which is usually at least minimum wage or a student learner rate established by the Department of Labor (DOL). Wages are paid by the employer.
- Eligible employers include both public and private employers.
- The program is carefully planned and records are kept. The specific skills to be obtained by the student are defined in consultation with the employer.
- The employer is involved as a partner of the school in the selection, instruction, and training of young workers.
- The program is supervised by a teacher or coordinator.
- Guidance counselors are involved in promoting, scheduling, providing occupational information, and counseling students in the program.
- The program is evaluated by the employer as well as by the coordinator.
- Students receive school credit for on-the-job experience.

Work Study Programs for Vocational Education Students

Overview. Work study programs are funded through Part H of the Vocational Education Amendments of 1968. Their purpose is to provide financial assistance to students who are in need of earnings from employment to commence or continue their vocational education program.

Student composition. Work study programs are for economically disadvantaged full-time vocational students. The age limitations are ages fifteen through twenty years.

Program organization. Work study programs are funded 80 percent through federal dollars. Funds are used for—

1. compensation of students employed;
2. development and administration of program.

Work study programs are administered by the state or local educational agencies under supervision of the State Board for Vocational Education in accordance with state plan provisions.

Goals. The primary goal of work study programs is to help disadvantaged students begin or stay in school by providing them with some financial support.

Key Program Elements.

- Students receive in-school vocational instruction not necessarily related to the job.
- Students work a maximum of fifteen hours per week while attending school.
- Students are paid $45 per month, $350 per academic year, or in certain cases $60 per month, $500 per academic year. Public funds are used for compensation.
- Students do not receive academic credit for their work.

Postsecondary Cooperative Education Programs

A more general type of cooperative education is prevalent in four-year colleges, universities, and a number of community colleges. Its purpose is somewhat broader than the vocational education co-op programs. Study and work are normally alternated in separate blocks of time. Cooperative programs of this type may be given partial federal support under the Higher Education Act.

Evaluation of Cooperative Education Programs

Reports

Numerous studies of co-op/work study programs have been conducted. Local and state programs have been evaluated in locations such as Minnesota (Gussing 1976), New York (Soper

Associates 1972), Detroit (Wayne State University 1967), California (Barbew 1963), and Indiana (Breckner and Medley 1975).

This section focuses on recent major evaluations of co-op/work study programs based on national or regional samples. The following are among the evaluations of this scope:

- *An Assessment of School Supervised Work Education Programs.* This is a national evaluation of fifty randomly selected secondary and postsecondary cooperative education, work study, job corps, and work experience programs (Frankel et al. 1973).

- *An Assessment of School Supervised Work Education Programs. Part II: Urban Co-op Work Education Programs and Follow-up Study.* This is the second part of the preceding study and focuses on urban programs drawn from national samples (Walsh et al. 1976).

- *School Supervised Work Experience Programs: Costs and Effects on Personal Development, Education, and Employment.* This study, based on a regional sample, evaluates the cost effectiveness of secondary vocational education co-op and work study programs (Lewis et al. 1976).

- *Cooperative Education and Career Development: A Comparative Study of Alumni.* This evaluation collected information from a national cross-sectional sample of co-op education and non-co-op education alumni at one-, five-, and ten-year intervals after graduation from college (Brown 1976).

The following is a brief description of each of these studies.

Frankel et al. USOE launched a two-part study to assess the effectiveness of school supervised work education programs in 1972. Part I of the study, conducted by Systems Development Corporation and completed in 1973, addressed the broad sweep of work education programs including cooperative education (mandated under Part G of the 1968 Amendments to the Vocational Education Act of 1963), work study (mandated under Part H of these amendments), job corps, and work experience (e.g., those funded under the Neighborhood Youth Corps and WCEP) programs. Fifty case studies were compiled, and interviews were conducted with samples of program participants and a cohort of students attending the same schools who were not enrolled in work education programs.

Several reports on this study have been prepared including Steven M. Frankel's *Executive Summary: An Assessment of School Supervised Work Education Programs* (Santa Monica, California: Systems Development Corporation, 1973); and Frankel's *Case Studies of Fifty Representative Work Education Programs* (Santa Monica, California: Systems Development Corporation, 1973).

Walsh et al. Part II of the study, conducted jointly by Olympus Research Corporation and DECIMA Research focused on work education programs located in urban areas. It had two major purposes:

1. To assess the effectiveness of these programs through the compilation of thirty case studies

2. To determine post-program experiences through follow-up interviews with 675 students participating in urban co-op programs and a cohort of 774 vocational education students who were not enrolled in cooperative education.

Several reports of this part of the study have been prepared including the following:

The Olympus Research Corporation's *An Assessment of School Supervised Work Education Programs. Part II: Urban Cooperative Work Education Programs and Follow-up Study Final Report* (1976) which is comprised of the three volumes and an executive summary listed below:

John Walsh and Vincent J. Breglio. *Volume 1: Overview of Thirty Urban Cooperative Education Programs.*

Vincent J. Breglio. *Volume 2: Work Education Program Outcomes—A 24 Month Follow-up Study.*

Theodore Bryant. *Volume 3: Thirty Case Studies of Urban Co-op Education Programs.*

Walsh, John and Vincent J. Breglio. *Executive Summary.*

Lewis et al. USOE sponsored another evaluation of secondary school supervised work experience programs in 1976. The population for this study was the largest fifty SMSA's east of the Mississippi River and their contiguous nonmetropolitan counties. Fifteen randomly selected school districts from this area agreed to participate. Data were collected from thirty-three high schools through—

1. self-administered questionnaires from 2,854 students participating in work experience programs and comparison groups with similar characteristics;

2. mail questionnaires from 2,253 former students who graduated in 1972 through 1974.

The purposes of the study were—

1. to determine the cost effectiveness of school supervised work experience programs by comparing the costs for these programs (about $125 per student) with their economic benefits for students (i.e., wage rates and unemployment);

2. to assess the effects of work experience on personal development, education, and employment.

A report on this study has been prepared by Mogan V. Lewis, Gerald P. Glyde, Duane E. Mckee, and Lee Ann Kozak entitled *School Supervised Work Experience Programs: Costs and Effects on Personal Development, Education, and Employment* (University Park, Pennsylvania: Institute for Research on Human Resources, Pennsylvania State University, 1976).

Brown. A study focused on college co-op programs was conducted by Brown (1976). This study collected information from a nationally selected sample of twenty-four postsecondary institutions. Twelve of these institutions had offered cooperative education programs since 1965 and twelve were comparable in terms of size, location, academic majors offered, and other characteristics. A sample of 1427 alumni from three graduating classes (1965, 1970, and 1974) responded to a mail survey from an original sample of 4,249. The response rate at 33.6 percent is somewhat low but appears to be fairly representative of the current population of co-op education students with regard to major and sex.

The purpose of this study was to explore the effect participation in cooperative education had on students' career development. Specifically, this included an examination of the relationship of undergraduate work experience to—

- academic major;
- choice of job after graduation;
- adequacy of career information;
- attitudes toward their Alma Mater;
- types of postgraduation activities;
- extent alumni felt prepared for their first full-time job;
- relationship between first job and academic major;
- characteristics of first job;
- method of locating first job;
- salary level on first job;
- job satisfaction;
- promotions and raises;
- employment patterns;
- characteristics of current job;
- future work plans.

A report on the study has been prepared by Slvia J. Brown entitled *Cooperative Education and Career Development: A Comparative Study of Alumni* (Boston, Massachusetts: Cooperative Education Research Center, Northeastern University, 1976).

Evaluation Findings

Figure 9 highlights some of the major variables, methods, and findings gleaned from the evaluations of co-op /work study programs described above. The specific source of each finding is noted.

Figure 9

Summary of Findings from Evaluations of Co-op/Work Study Programs

OUTCOMES	INSTRUMENT/METHOD USED	RESULTS
JOB SKILL DEVELOPMENT *Job Skills*	Self-administered mail questionnaire.	More co-op students held initial positions which required some special skills. However, this advanced job skill level is short term in nature; beyond the first job, no additional advantage accrues to the former co-op student (Lewis 1976).
Job Placement & Retention Job Placement	Self-administered mail questionnaire.	Former work experience students receive more on-the-job training after graduation than students who did not have work experience (Lewis 1976). Students' chances of finding a job related to their training were slightly increased by participating in work experience. Co-op students were more likely than non-work experience students to obtain jobs which were related to the occupational areas they studied. Within this group, female co-op students in office occupations were the most likely to obtain jobs in areas they had studied (Lewis 1976). About 50 percent of the co-op students obtain jobs related to their training after graduation. If co-op education is evaluated on this criterion alone, the results are not encouraging. But the authors go on to suggest that this may not be the most appropriate measure of performance. Secondary students were often engaging in *occupational exploration* to find out what different jobs were like rather than committing themselves to a specific career (Lewis 1976).
		Co-op students acquire suitable jobs witnin a shorter period of time after leaving high school and had slightly less short-term unemployment when they did so. About one half the co-op students stay on with their employer after they graduate (Lewis 1976).

	Case studies of thirty urban work education programs.	Average completion and placement rates for secondary urban co-op education programs were high. Average completion rates were 84 percent. Average placement rates were 70 percent. The training related placement rate was 75 percent (Walsh and Breglio 1976).
Job Satisfaction	Self-administered mail questionnaires.	No significant differences were found in job satisfaction between former students who had and had not had work experience while in high school (Lewis 1976).
	Series of questions focusing on satisfaction with pay and fringe benefits, working conditions, challenges, and opportunities were asked in interviews.	Participating students in postsecondary specific occupation programs expressed more positive attitudes toward their jobs than nonparticipants. There was little difference in job satisfaction for secondary participants and nonparticipants (Walsh and Breglio 1976). The least satisfied groups were those who participated in secondary dropout prevention programs.
Employer Satisfaction	Self-administered mail questionnaire.	Co-op students were viewed as more dependable and as better workers than regular employees (Lewis 1976). Firms that had more experience with cooperative employees tended to pay them higher wages (Lewis 1976). Employers found that co-op programs reduced recruitment costs and helped them to evaluate potential regular employees (Lewis 1976).
Long-Term Employment	Follow-up interviews two years after program completion.	Both secondary and postsecondary participants fared slightly less favorably than nonparticipants in employment status. Eighty-four percent of the postsecondary and 80 percent of the secondary participants were working, in the service, or going to school compared to 95 percent (postsecondary) and 87 percent (secondary) of the nonparticipants at the chi square level of 0.01 and 0.10 respectively (Walsh and Breglio 1976).

Figure 9 – Continued

OUTCOMES	INSTRUMENT/METHOD USED	RESULTS
Earnings	Self-administered mail questionnaire.	Students from work experience programs do not earn more after two years on the job than students who have not had work experience (Lewis 1976).
	Follow-up interviews.	At the secondary level, program participation had little effect on average weekly earnings. However, secondary students trained in specific occupations enjoyed a slight salary advantage over nonparticipating students on their first post school job. At the postsecondary level, participating respondents earned substantially more than their nonparticipating counterparts. A sizeable portion of the advantage enjoyed by participating students in postsecondary programs may be attributed to those trained in manufacturing, marketing, and distribution and health care areas. Generally across all programs and occupational categories, men earned more per week than women (Walsh and Breglio 1976).
Employment Stability	Follow-up interviews.	For urban co-op students, employment stability for the fifty-two-week period following graduation ranged from a low of thirty-three out of fifty-two for dropout prevention participants to a high of thirty-eight out of fifty-two for postsecondary participants. No significant differences were found between participating students and a control group of nonparticipants (Walsh and Breglio 1976).
	Self-administered mail questionnaire.	The former work experience student changed jobs slightly less the first two years after graduation (Lewis 1976).
ACADEMIC DEVELOPMENT *Academic Achievement*		No findings reported.

Educational Awareness Attitude toward Learning & School	Self-administered mail questionnaire.	Co-op students were more likely than part-time nonschool supervised workers to report that they were well prepared for their jobs and that they were learning more both in their courses and on their jobs (Lewis 1976).
	Case studies of thirty work education programs.	Participants in the urban co-op programs expressed more positive attitudes toward school and work than nonparticipants. • Postsecondary participants expressed more satisfaction than secondary participants. • Women were less satisfied with school and jobs than their male counterparts. • Postsecondary minorities expressed more positive attitudes than nonminority participants; at the secondary level the opposite was true (Walsh and Breglio 1976).
Informed Course Selection	Self-administered mail questionnaire.	Significantly more co-op students, both male and female, had jobs that were related to their classroom studies. A greater percentage of these students reported that their classroom studies were either good or very good preparation for their high school employment (Lewis 1976). Co-ops reported preparation for employment as the reason for their course choices more frequently than any other group (Lewis 1976).
CAREER DEVELOPMENT & LIFE SKILLS *Career Skills* Occupational Knowledge	A nonstandardized occupational knowledge test consisting of seventeen items, each of which included a short job title and three short descriptions of job duties, only one of which was correct.	Holding a job while in school—school supervised or part-time—is associated with scoring higher on an occupational knowledge test. The differences among the groups were not large but were statistically significant. These results were found even when the influence of sex, race, and IQ were held constant (Lewis 1976).

Figure 9 – Continued

OUTCOMES	INSTRUMENT/METHOD USED	RESULTS
Career Planning and Choice	Self-administered mail questionnaire.	Almost 50 percent of the work experience students planned to continue their formal education after high school. Results from the former students showed that these were largely realized (Lewis 1976).
Employability Skills Work Habits	Self-administered mail questionnaires.	Co-op students are less likely to leave their jobs or be absent from work than regular employees (Lewis 1976).
Life Skills		No findings reported.
PERSONAL GROWTH DEVELOPMENT *Self-Awareness*		No findings reported.
Interpersonal Skills		No findings reported.
SOCIAL REMEDIATION *Economic Indicators* Income Transfer	Case studies of fifty urban work education programs.	Substantial numbers of minority, disadvantaged, and average to below average students are being enrolled in urban co-op education programs and these programs have been designed specifically for these students (Walsh and Breglio 1976).

Cost Effectiveness	Cost questionnaire completed by school officials was used to calculate an average cost to schools for work experience programs. This figure was compared to a quantified benefit factor (i.e., wages and unemployment) to compute a cost/benefit ratio.	The average cost per student for high school work experience programs is $125 above the regular per pupil expenditures. This is not a cost effective expenditure when viewed from strictly economic perspective and compared to the earnings of former work experience students after high school.
Social Indicators School Return, Retention, and Completion		Work study students were the most likely to think seriously about dropping out of school and to report that they disliked school and were getting poor grades. However, one of their primary reasons for not dropping out (which differed significantly from other groups) was holding jobs while in school (Lewis 1976).
Reduction of School Truancy	Self-administered mail questionnaire.	Students without jobs are more likely to be truant and skip more days of school. Male students with jobs were the least likely to be truant (Lewis 1976).

Synthesis of Evaluation Findings

The evaluations of co-op programs have been quite comprehensive and varied. It appears that cooperative programs are successful in teaching students entry level job skills and in helping students quickly find employment in their area of training. Over time the initial employment advantage for co-op students seems to equalize to the level of students without co-op training. For example, two years after completion of training, no significant differences between co-op and non-co-op students were found in earnings, employment stability, long-term employment status, or job satisfaction.

Co-op students appear to have more positive attitudes toward their educational programs than non-co-op students. Co-op students are less likely to be truant and more likely to stay in school until graduation, when they hold jobs. Variables such as self-awareness, interpersonal skills, and life skills were not measured sufficiently to provide conclusive information. A limited amount of information on career skills and work habits reveal that co-op students may be gaining more ground than their non-co-op counterparts in these areas.

Evaluation Problems

Evaluations of co-op programs have tended to avoid measuring career development and personal growth variables, although these programs claim to build students' skills in these areas.

CHAPTER 7
VIGNETTE FIVE: NEIGHBORHOOD YOUTH CORPS*

Program Description

Overview

The Neighborhood Youth Corps (NYC) was created in 1964 under Title I-B of the Economic Opportunity Act. The NYC programs were terminated with the passage of the Comprehensive Employment and Training Act (CETA) in 1973. However, the focus on youth programs has been picked up through Title III of CETA and more recently and directly through the Youth Employment and Demonstration Projects Act (YEDPA) passed in 1977. NYC was designed to get young people back into school, to keep them in school, or to increase their chances of becoming employable. Since more evaluative information is available on NYC than YEPDA Programs, the former were selected for this analysis.

Student Composition

The program provided part-time work experience, remedial education, and limited job training for disadvantaged youth from the ages of fourteen to twenty-four who either did not complete high school or were potential high school dropouts.

Program Organization

NYC consisted of three distinct but related programs: a full-time program for high school dropouts, a part-time job-school program for youths, and a summer employment program. The in-school program emphasized job market orientation and work experience. The out-of-school and summer programs emphasized skill training.

The in-school program, which is of primary interest in this document, attempted to motivate and equip youth to stay in school; to perform better academically; and to make sound career and educational choices. Enrollees were provided with part-time employment while attending classes and, in many cases, summer jobs were made available. Most of NYC enrollees were in the ninth, tenth, or eleventh grades. Approximately one million youth from low income families participated in the in-school NYC program between 1964 and 1972.

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*Adapted from C. R. Perry, B. E. Anderson, R. L. Rowan, and H. R. Northrup. *The Impact of Government Manpower Programs* (Philadelphia: University of Pennsylvania, 1975).

Program Operation

NYC projects were administered by state and local governments and by private, nonprofit agencies. Programs varied in the degree and type of remedial education and supportive services offered. Training and services differed by site and sex: for the most part, females were placed in clerical and nursing positions while males were assigned to custodial and janitorial slots.

Goals

The goals of NYC whether implicitly or explicitly stated, can be summarized as follows:

1. To increase the employment of youth
2. To increase the lifetime earnings of enrollees through training, work experience, and incentives to stay in school and work
3. To reduce teenage crime
4. To redistribute income to the poor
5. To provide skill training for entry level positions

Evaluation of NYC

There have been two major evaluations of the in-school component of NYC. Gerald D. Robin (1969) assessed the behavioral changes that could be derived from participation in the NYC program in Cincinnati and Detroit. Gerald G. Somers and Ernst W. Stromsdorfer (1970) conducted a cost effectiveness study based upon a nationwide sample of in-school and summer participants.

Robin. In the Robin study, evaluation data were obtained from selected groups of NYC youths in personal interviews conducted at three points in time over a one-year period. These were supplemented by information collected from school files, police records, and interviews with a subsample of the mothers of the interviewed youths. Four distinct groups—year-round enrollees, summer-only enrollees, program dropouts, and control subjects—were selected as samples for study. The number of white youth interviewed during the initial phase of the investigation was too small for meaningful statistical treatment; therefore, the evaluation was restricted to a study of black youth.

Somers and Stromsdorfer. The extensive study by Somers and Stromsdorfer of a nationwide sample of NYC participants employed multiple regression and cost effectiveness analyses to investigate the costs and benefits of the program. Social, governmental, and private benefits were measured. Based upon information gathered about participants enrolled in sixty in-school and summer NYC programs sometime between July 1, 1965 and June 30, 1967, the labor market and educational performances of both the sample NYC group and controls were ascertained. Data are provided by race and sex.

Other evaluations. Several other evaluations have been conducted. A study conducted by Walther, Magnusson, and Cherkansky (1971) inquired into the impact of NYC on the high school dropout problem.

In the series of reports comparing the NYC programs of various inner city areas, Regis H. Walther examines the impact of NYC at different points in time. Using control groups, these studies try to measure the effect of the program on the educational attainment, employment, and attitudinal changes of the enrollees. The impact upon education is measured on the basis of returns to school, participation in remedial education programs, school attendance records, and educational achievement tests. Changes in labor market status are evaluated on the employment activities of participants at various time intervals after leaving NYC; this includes an analysis of the number of job changes incurred by NYC participants. The nature of termination from NYC was also investigated. Terminees were classified as leaving the program for one of four reasons:

1. Planned terminations (employment, training, school, or military reasons)
2. Administrative reasons (expiration of agreement, completion of standard term, or ineligibility)
3. Premature, NYC initiative (poor attendance, fired, misconduct)
4. Premature, other (quit, could not adjust, lost interest, moved, married, family problems, pregnancy, committed to an institution)

The basic format used was the same in all of the Walther studies; thus, this series of reports might be considered one analysis of NYC.

The Olympus Research Corporation study, "The Total Impact of Manpower Programs: A Four City Case Study," contains subjective judgments based on impressions gained from interviews on the labor market impact of several manpower programs including NYC.

Herman and Sadofsky (1967) attempted to assess changes in self-esteem and work attitudes six months after enrollment in NYC. The study was based upon attrition rates, respondents' views of NYC, and the impact of NYC assignments upon the new working life of the respondents.

Evaluation Findings

Some of the major findings from these evaluations are highlighted in Figure 10.

Figure 10

Summary of Findings from Evaluations of NYC

OUTCOMES	INSTRUMENT/METHOD USED	RESULTS
JOB SKILL DEVELOPMENT *Job Skills*		No findings reported.
Job Placement & Retention Job Placement		Participants in the NYC were employed more, and out of the labor force less than controls in the post high school period. However, participants had more months of unemployment (Somers and Stromsdorfer 1970).
Earnings		A control group study based on a nationwide sample of the in-school Neighborhood Youth Corps revealed negligible differences in earnings between participants and controls. The study revealed total before tax earnings for participants in the post high school period as $4,159 as compared to $4,247 for controls (Somers and Stromsdorfer 1970). A four-city case study of the total impact of manpower programs indicates that, as a group, participants in manpower programs enjoyed higher annual earnings in the year after training than they did in the year or years preceding entry into training. Translated into annual income equivalents, the average enrollee gained $1,380 or a 40 percent increase over the thirty-six month period prior to enrollment. However, the average enrollee was still earning at a rate of $3,000 per year (Olympus Research Corporation 1971). Across the four cities, the average hourly wage rose by $.42 an hour between the year prior to and the year after enrollment. The average post training wage rate exceeded $2.00 per hour—the level required to achieve income slightly above the poverty line—for full-time, full year employment (Olympus Research Corporation 1971).

Employment Stability	Case study.	A four-city case study of the total impact of manpower programs found only modest pre/post training increases in employment stability (percent of available time worked by those reporting employment in a given time period) and employment intensity (percent of total potential time worked by the total trainee group). The highest post training rate was only 70 percent for employment stability and 50 percent for employment intensity (Olympus Research Corporation 1971).
ACADEMIC DEVELOPMENT *Academic Achievement*	School files.	An analysis of black NYC participants based on data collected through school files revealed no evidence that NYC had a favorable effect upon the scholastic achievement of its enrollees. In fact, since enrollees spent time working instead of at their studies, participation in NYC impaired grades of enrollees who had previously performed adequately in their studies (at least C average prior to enrollment) (Robin 1969).
Educational Awareness		No findings reported.
CAREER DEVELOPMENT & LIFE SKILLS *Career Skills*	Rating scale.	Enrollees rated the NYC out of school program in four cities on a five-point scale ranging from "not at all useful" (1) to "very useful" (5). The mean rating of overall usefulness was generally over "4," with female subjects indicating a more positive response to this question. Enrollees' estimates of their chances of achieving their ten-year occupational goals were also noted. Most of the study subjects had employment objectives that were perhaps beyond their capacities to achieve, in that they required new job and training experience. Approximately three-fourths of the respondents, however, rated their chances of goal achievement as "very good" or "fairly good" (Walther).

Figure 10 – Continued

OUTCOMES	INSTRUMENT/METHOD USED	RESULTS
Employability Skills Work Attitudes	Interviews.	A study comparing enrollees of NYC's in-school program and a carefully chosen control group in two cities—Cincinnati and Detroit—concluded that the program had no discernible impact on the youths' conception of work, their willingness to relinquish the security of steady training that would prepare them for better jobs, their perception of conditions which may interfere with obtaining suitable employment, their professed job characteristic preferences, or their occupational expectations (Robin 1969).
Life Skills		No findings reported.
PERSONAL GROWTH DEVELOPMENT *Self-Awareness* Self-Esteem		A review of black Neighborhood Youth Corps participants six months after enrollment concluded that there was an initial positive shift in self-esteem and work attitudes as a result of participation which thereafter tended to remain stable (Herman and Sadoksky 1968).
Interpersonal Skills		No findings reported.
SOCIAL REMEDIATION *Economic Indicators* Income Transfer		The four-city study assessed the income transfer of the Neighborhood Youth Corps (NYC) as "needed, and though some of the experiences may have been counter productive, most of it was probably better than none" (Olympus Research Corporation 1971).

Social Indicators School Retention & Completion		In a study of the NYC out-of-school program, the investigators found that female participants were more likely to return to school and to complete high school when they did return, than were males. The study also revealed, however, that a greater percentage of the control group than of those in NYC returned to school. It appears that the impact of NYC on school enrollment was either nonexistent or very limited (Walther, Magnusson, and Cherkasky 1971). Another study of NYC's in-school program found that the program had no statistically significant effect on the probability of high school graduation or on the years of school completed. It was also found that for NYC participants as compared to their control group counterparts: black females are 12.5 percent more likely to graduate and American Indians are 14.6 percent more likely to graduate.
Deterrent to Delinquency		One analysis of the Neighborhood Youth Corps summer project in Washington, D.C. found an inverse relationship between the the number of NYC slots and the incidence of crime. This study concluded that NYC had a slight beneficial impact upon aggregate juvenile delinquency statistics but this alleged relationship did not appear to be statistically conclusive (DOL 1972). Another study of NYC in-school and summer programs delineated the delinquency profile for participants for the periods before they enrolled in NYC, while they were working in the program, and from the point of enrollment to the date of offense check. The study concluded that "NYC participation, among both males and females, is unrelated to delinquency prevention or reduction."

Summary of Findings

Despite the large number of reports on the Neighborhood Youth Corps, few attempted to assess the impact of the program. Evidence of differential impact by race and sex is limited. Some studies, however, discuss the effect of the program upon the labor market performance, educational achievement, and delinquent behavior of NYC participants.

In terms of economic impact, the findings revealed that compared to the control group, the NYC group—

- was employed slightly more months since leaving high school but this was not statistically significant;
- experienced slightly lower before tax earnings but this was not significantly different;
- was out of the labor force (unemployed) a somewhat shorter time;
- had significantly higher post high school gross earnings (this is attributed to the smaller number of months of labor force withdrawal on the part of NYC participants).

The findings revealed that male NYC participants as compared to female participants—

- earn more;
- have less voluntary labor force withdrawal;
- show no difference in unemployment.

When compared with their respective control groups—

- NYC males earn more while NYC females do not;
- NYC females are unemployed more, have fewer hours of nonlabor force participation, and work less hours per week.

The studies demonstrate that blacks benefit more economically than whites from NYC with positive gains evident among both males and females. The benefits attained by black females account for much of the overall gains of the total sample.

In terms of noneconomic impact, it was concluded that the NYC program had no statistically significant impact upon the probability of high school completion or the number of years of school completed.

Evaluation Problems

The extent to which participation in manpower programs has resulted in increased schooling is difficult to document. Difficulties arise in measuring school achievement because many of the enrollees do not have the attitudes toward testing associated with middle class society. Many tests used in defining academic gains have been found to be culturally biased. In addition, comparisons of grades completed and educational attainment of groups are inconclusive. In many cases, the act of formally withdrawing from school may have occurred years after the individual had lost interest in attending class. Graduation from high school is not necessarily synonymous with educational skills; even those who have a high school diploma have been found deficient in reading and arithmetic skills.

SECTION III

CONCLUSIONS ABOUT ASSESSING EXPERIENTIAL EDUCATION

In the conclusion a summary of the evaluation findings is offered. In addition, six issues are discussed which appear to be of particular concern to evaluators. Insensitive measurement tools, lack of control over learning experiences, and heavy use of classical research are offered as some of the problems.

Endings often indicate the need for new beginnings. In this light, we suggest the need to perhaps consider some alternative approaches to evaluating experiential education programs.

CHAPTER 8
CONCLUSIONS

Synthesis of Evaluation Findings

In this section evaluation trends or patterns resulting from the analysis of the five experiential education programs will be discussed. Figure 11 provides an overall summary of the findings and outcomes. This figure was derived by listing the eleven major outcomes (from Figure 2) along the left margin. Across the top of the chart, the methods used and findings from the evaluation studies are displayed. The methods used in the evaluations of the five programs were classified as paper and pencil tests, questionnaires, interviews, case studies, and record reviews. Within this classification, the target populations for the evaluation study have been identified. These target populations include program students, program and comparison students, program participants, and parents. In addition to the methods used, the findings resulting from the evaluation studies have been classified as evidence supporting the outcome, evidence not supporting the outcome, and no evidence reported. The numbers in the cells represent the frequency of methods used and the corresponding findings that resulted for each of the eleven outcomes. Thus, the extent to which the results of these methods found positive evidence that the program outcomes were achieved can be tentatively identified.

The reader should keep in mind that the results of Figure 11 are not as precise nor as tidy as they appear. The outcomes represent the authors' best judgment regarding a framework for describing goals and outcomes. The evaluation results were summarized and forced into our classification frameworks. Not all reviewed studies provided explicit research design information. For example, a case study may have included both questionnaires and interviews. It was not always possible to separate the methods used to collect the data from the reported evaluation findings. Finally, the classification of the findings in Figure 11 are based on the judgment of the evaluators of the five programs regarding whether the evidence supported the achievement of the outcome.

To aid in the interpretation of this information, an example is provided. One outcome identified for the goal of job skill development was job skills. For the programs reviewed, one program evaluation reported on findings relating to job skills. In this instance, a self-administered questionnaire was mailed to program participants (treatment students) who had completed the program. Findings from this questionnaire suggested that students had obtained initial jobs that required special skills learned from the experiential education program. Thus, the evidence suggests that the outcome is being achieved. For purposes of deriving Figure 11, the conclusions appear to be more precise than they actually are. Hence, Figure 11 is artificial to the extent that it oversimplifies the complexity of the findings especially as they relate to their full interpretation in relationship to other supporting evidence.

Even with the above limitations, Figure 11 provides some insights as to patterns regarding the evaluation of experiential education programs. Case studies and record reviews were the least used techniques to find evidence that the outcome was achieved. Evidence that supported the achievement of the outcome was more frequently found from the use of questionnaires and interviews than from paper and pencil tests. It would appear that the more the evaluators' judgments are required to interpret the information, the greater the likelihood that the outcome is achieved.

Figure 11

Overall Summary of the Frequency of Methods Used and Their Findings as They Relate to Evaluating Outcomes

EXPERIENTIAL EDUCATION OUTCOMES	METHODS											FINDINGS		
	Paper & Pencil Tests		Questionnaires				Interviews							
	Experimental Students	Experimental and Comparison Students	Experimental Students	Experimental and Comparison Students	Program Participants (Sponsors, Mentors, Coordinators)	Parents	Experimental Students	Experimental and Comparison Students	Program Participants	Case Studies	Record Reviews	Found Evidence that Outcome Achieved	Found Evidence that Outcome Not Achieved	No Evidence Reported
Job Skills			1									1		
Job Placement & Retention			3	4	2					2		3 1 1	4 1 1	
Academic Achievement		7	2		2	2					1	3 2 2 2 1	4	
Educational Awareness			2	2		2				1		2 1 2 1	1	
Career Skills	2		2			1	1	1				2 1 1 1	2	
Employability Skills		1	2	1	2	1	3	1	3	1		1 1 2 1 3 2 1	1 1 1	1
Life Skills		2										1	1	
Self-Awareness		2	2		1	2	2		1			2 1 2 2 1	2	
Interpersonal Skills						2	1	1				2 1 1		
Economic Indicators			2	1				2		1		1 1	1 1 2	
Social Indicators			1								3	1 2	1	
TOTALS	14		42				16			5	4	56	24	1

Using a control group for comparison, regardless of the method, tended to decrease the likelihood of finding evidence that supported the achievement of the outcome. It may be that in reality the outcomes are not being achieved. However, the authors believe this is not the case. It is our opinion that the lack of evidence from classical research evaluations (experimental studies) may be due to such factors as: the lack of a defensible standard or norm to compare results; inappropriately chosen control or comparison groups; insensitive paper and pencil tests; or heavy reliance on statistical methods to detect subtle changes in student behavior. Our view of the problems associated with evaluating experiential education programs is presented in the following section.

Problems in Evaluating Experiential Education Programs

There are two basic questions that an evaluator asks when attempting to assess the effectiveness of a program:

1. What should be measured?
2. What is the best way to measure it?

A variety of problems plague the aspiring evaluator of an experiential education program as he/she attempts to answer these questions. The problems stem from both the characteristics of the programs and limitations in the methods applied to evaluate them.

The authors have placed the evaluation problems into six categories. The categories are not discrete but represent our judgment regarding major areas of concern.

1. Evolving objectives of experiential education programs.
2. Skirting important outcomes in evaluations.
3. Lack of control over the learning experiences in experiential education programs.
4. Insensitive measurement tools.
5. Subtle effects of experiential education programs in affective areas.
6. Emphasis on classical research.

Some examples of these evaluation problems are highlighted in the following sections.

Evolving Objectives

It is difficult to tie down and clearly state the specific objectives of experiential education. It is hard to specify objectives for any program; but, this is especially true of experiential learning. The objectives are often ambitious and broad, students' experiences are diverse and individualized, and the nature of the program is "experiential" rather than carefully preprogrammed.

Objectives are often used for purposes other than program planning and evaluation such as getting funding, gaining school support, and gaining community support. The true objectives of a program may not be the stated objectives.

A hidden curriculum that more accurately reflects the purpose of a program is described by Crowe and Walker in the *Evaluation of the Executive High School Internships Program: Executive Summary*. Although difficult to ferret out, a hidden curriculum may exist that more precisely expresses the nonstated, imprecise goals of a program.

Defining measurable objectives may not be in the best interests of the program. It is hard work, increases the risks, and promises no obvious professional reward for success. Program managers often perceive that unmeasurable objectives are an asset in that they help to retain flexibility and insure survival. In addition, because of the nature of experiential learning, it may not be possible to state objectives at the same level of measurability as for a math class, for example.

The authors propose that an examination of goals of experiential education programs is required before developing a full-blown evaluation study. Figure 12 displays our notion of the relationship between goals and consequences of such programs.

Figure 12

Relationship of Goals and Consequences

		CONSEQUENCES	
		Intended	Unintended
GOALS	Stated	Expected, obvious	Negligent, pleasant occurrence
	Nonstated	Hidden curriculum	Serendipity

Observation of this diagram reveals four cells that could result from intended and unintended consequences resulting from stated and nonstated goals. Of course unintended consequences are those outcomes that were not known or hypothesized prior to an evaluation. Once the unintended consequences have been identified they become intended. We have labeled goals as stated and nonstated because our experience suggests that implementers of innovative programs have a public (stated) and private (nonstated) agenda with regards to their program. The stated goals are those that are pedagogically sound, politically safe, and philosophically coherent. The nonstated goals are those that are in participants' heads and motivate them to actively participate and support the program.

Many experiential education programs are developmental in nature. The objectives are evolving rather than preordained. We are not sure what kinds of learning students should acquire from experiential programs. Should they be—

- learning to function in an adult role?
- learning what work environments are really like?
- learning more about themselves?
- learning specific job skills?
- clarifying career plans?
- learning a combination of all the above?

Until we find out more through careful observation about what students are actually learning from these programs, it is arbitrary to evaluate them against preordained objectives.

Skirting Important Outcomes in Evaluations

Deciding which outcomes of experiential education programs should be measured is a difficult task. One must continually ask the question: Are the things we can measure well the most important to measure? Variables that are tougher to measure such as job satisfaction, work attitudes, and self-esteem are often overlooked in favor of those which are easier to measure, i.e., job placement and academic achievement.

Limited Control of the Learning Experiences in Experiential Education Programs

There is less control over what students learn in a work setting than in a traditional classroom. The school has limited control over the role of the sponsors (employers)—their level of commitment, manner of working with the student, or their skills as teachers. Each student is placed in a different environment with a different sponsor in a different job. In essence, no two experiences are the same. The students' experiences are influenced by the type of environment in which they are placed (e.g., a farm versus an office versus a factory). The students' experiences are influenced by their sponsor (employer) who is usually not trained in teaching. Because there is only limited control over the learning experiences, it is difficult to develop precise parameters for evaluation.

Insensitive Measurement Tools

The sequence of learning in experiential education differs from the sequence of learning used in the classroom. Many experiential learning sequences begin with application—performing a task or learning how work environments actually operate. Knowledge and understanding of the underlying principals and theories grow out of doing. The classroom learning sequence begins with knowing and understanding bits of information which are later applied. This basic difference makes many techniques that are appropriate for evaluating classroom learning inappropriate for evaluating experiential education.

Cognitive paper and pencil tests which attempt to measure learning through abstract cognitive structures may fail to measure the reality based know how students gain from experiential learning.

Subtle Effects of Programs in Affective Areas

Many of the expected outcomes of experiential education are affective in nature. Significant pre-post differences in affective variables such as self-esteem, job satisfaction, attitude toward work or relationships with others are rarely found in past evaluations of experiential education programs.

These effects, when they occur, are often subtle and difficult to pick up through the types of measurement tools used; for example, a frequently used measurement tool in some type of self-rating format. However, self-ratings tend to be high for most people most of the time. This leaves little room for growth to be measured through pre-post or control group testing. More sensitive and perhaps indirect measures of affective outcomes are needed.

Classical Research Versus Alternatives

Classical research paradigms may have limited utility for testing the effects of experiential education programs, especially in the formative developmental stages. While classical research can provide information to individuals, the conditions appear to be such that experiential education is not ready for this type of in-depth examination. The emphasis on using classical research paradigms in evaluating these programs can lead to experiments that are elegantly designed but often limited in scope and relevance. The logic of experimental research for the hard sciences is undefeatable yet it has often not served us well in evaluating these programs. The rigidity of the experimental model may, in fact, perform a disservice in educational evaluations. It has encouraged us to examine hypothesized effects of programs without learning much about what really happened in the program, what students actually learned, why the program worked or failed, or what features of the program were most and least effective. A rigorous experiment is expensive in terms of time, dollars, and energy needed to conduct it. Yet after outlaying resources we often find no significant differences and little significant information to pass on to the next program manager, program evaluator, or decision maker.

The premature execution of classical research may force us to squeeze a program into boxes it was never meant to fit, mask true program outcomes, and justify program effects which may have been lucky artifacts rather than educationally significant effects. Figure 13 contrasts some of the assumptions behind experimental research with the assumptions behind experiential education.

These differences lead to the conclusion that alternatives are needed to evaluate experiential education. More emphasis on describing the actual experiences of students and the ways in which program resources are used is needed so that we may become more sensitive to what is actually happening in these programs.

Figure 13

Assumptions Behind Experimental Research and Experiential Education

EXPERIMENTAL RESEARCH	EXPERIENTIAL EDUCATION
Assumes that we know what the treatment is.	Is often a short-term, one time only, unfamiliar experience for one student. There is no structure comprehensive enough to define every possible experience a student could have in a work environment. If it was possible, it probably would not be functional.
Assumes that we can predict what effects are going to happen from the treatment.	Is a unique experience for each student based on their background, level of maturity, work environment, sponsor, type of job, motivation, and many other factors. This makes it difficult to predict precise outcomes for individuals and even more difficult for groups.
Assumes that a treatment is significant when it affects the majority of the subjects in a similar way.	Expects students to profit in different ways by their experience.
Assumes that the treatment conditions can be controlled.	Exerts very limited control over the specific experiences that are going to happen to students since the work environment has a life of its own.
Assumes that effects measured through group perception have more validity than the insight of an individual.	Because of its diversity, may be better evaluated by one perceptive observer or a team of observers who can preserve differences as well as see patterns.
Requires meeting a complex chain of assumptions to generate credible results • the program had objectives • the program implemented its objectives • valid and reliable instruments were used to measure program effects • respondents to the instruments are representative • control or norm comparisons are used • statistical tests are appropriate, etc. When any link in this chain is violated, the results become suspect.	Is an evolving entity. A rigid framework which penalizes one for not knowing precisely what the program will be from the outset cannot capture its effects. Attempting to measure the diffuse, developmental, and often subtle effects of experiential learning with classical research paradigms is analogous to measuring a rainbow with a yardstick.

Alternatives to Current Practices

As part of the effort associated with this research effort, project staff investigated alternatives to current practices on evaluating experiential education programs. This effort is reported in a companion report titled: *Perspectives on Investigating the Consequences of Experiential Education* edited by Crowe and Beckman. Briefly, this effort involved obtaining four perspectives on experiential education and its outcomes. The perspectives represented psychology, economics, anthropology, and sociology. The conclusions from this effort are presented below:

- *Extend the notion that luck or chance create critical incidents which cause major changes in a person's life, i.e., to consider an experiential education program as a critical incident in a student's life.*

  Rather than leaving major life changes to chance, increase the number of experiences so as to increase the probability of students encountering a critical incident. The success of the program (experience) would be measured in terms of pronounced change in the direction that a student's life took rather than specific changes in the student's behavior.

- *Evaluate experiential programs within the context of career development theories.*

  The theory or framework would serve as the vehicle by which to specify how the program should contribute to the development of a student's career. Measurement would involve using individuals as their own base-line control and then aggregating in terms of the particular objective specified by the theory.

- *Choose a variable that is related to program outcomes to determine the effectiveness of experiential education programs.*

  A labor market variable such as earnings was suggested as reasonable. Earnings are less ambiguous than test scores as measures of program effectiveness and do not require elaborate constructs to define their meaning. Measurement would involve repeated observations of earnings of participants and nonparticipants of experiential education programs.

- *Use direct observation to describe the structure of relationships among individuals and between individuals and their environment.*

  Since standardized tests do not always explain student behavior, the use of observation would provide additional evidence to explain what really happens in a program. Measurement would, therefore, rely on the accuracy of the observations.

- *Extend the scope of analysis to include social structure.*

  This would add the dimension of understanding the student's motives, beliefs, and actions as a product of social relationships. The unit of analysis would be the school rather than the individual. Rather than using a single measure or repeated observations, the use of several methods to test the same points is encouraged to find evidence of program effectiveness.

CONCLUSIONS

The results of the effort provided provocative ideas for future investigations, but did not lead to a single approach or new methodologies for evaluating experiential education programs. Many of the ideas have been tried, in part, by evaluators of innovative programs. What was accomplished was confirmation of many of the techniques evaluators have already used but often expressed doubts about because they were not based in experimental research. The next step is to develop fully, understand, and implement the ideas in future evaluations.

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